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TENTH ARMY IN THE OKINAWA CAMPAIGN: AN ANALYSIS FROM THE OPERATIONAL PERSPECTIVE

A thesis presented to the Faculty of the U.S. Army Command and General Staff College in partial fulfillment of the requirements for the degree

MASTER OF MILITARY ART AND SCIENCE

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by

ROBERT G. FIX, CPT, USA
B.S., UNITED STATES MILITARY ACADEMY, 1981

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

TENTH ARMY IN THE OKINAWA CAMPAIGN: AN ANALYSIS FROM THE OPERATIONAL PERSPECTIVE by CPT Robert G. Fix, USA, 115 pages.

More so than any other operation, the Campaign to seize Okinawa in the closing days of World War II represents the greatest joint effort undertaken by the US Military. From its organization to the way it fought, Tenth Army incorporated every element of the service to a degree never before attempted and never since replicated.

This study analyzes the Okinawa Campaign, Operation ICEBERG, using the operational operating systems as a framework for assessing how well the Tenth Army conducted the campaign and for determining what lessons are applicable to joint operations at the field army level.

This study first traces the historical background of field armies in the twentieth century and shows that every major conflict has included combat operations at this level. It then outlines the operational operating systems as defined in TRADOC Pamphlet 11-9. Before actually analyzing the campaign, the study provides a battle summary of the Okinawa Campaign which provides the basis for analysis.

The study then looks at the campaign through each of the six operational operating systems to determine how Tenth Army planned for the operation, how well it performed, and what lessons can be extracted and applied to today's joint operational requirements.

Although Okinawa was the largest joint operation of the war, it was not the largest planned joint operation. Operation DOWNFALL, the campaign to seize the Japanese islands, was the largest planned. So Okinawa was really a test of how joint operations at the large unit level could be conducted. Although the war ended prior to the invasion of Japan, the lessons the US Military learned in executing ICEBERG are still relevant and still provide insight into how joint operations should be conducted at the field army level.

ACKNOWLEDGEMENT

I would like to express my deep appreciation to my thesis committee; Mr. John Reichley, Mr. Richard O. Wightman, and Dr. Charles Endress. Their invaluable advice and support were instrumental in my completing this endeavor. Special thanks to John for his weekly inspiration and for keeping me on schedule.

To my wife, Debbie, and sons, Bobby and Joey, I dedicate this effort. Without their patience, support, and sacrifice this would not have been possible.

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Chapter I

Introduction

Background:

Tench Army's campaign on Okinawa during the closing days of the war against Japan represents a monumental step in the development of joint and combined operations. After three-and-one-half years of sporadic cooperation and intense inter-service rivalry, US armed forces in the Pacific organized and employed a field army that was a joint organization both in structure and employment. The Tenth Army consisted of the Army's XXIV Corps and the Marine III Amphibious Corps. It included a tactical airforce commanded by a Marine major general, a logistical support system comprised of all services, and a naval officer as the deputy chief of staff. LTG Simon B. Buckner, the Tenth Army commander, reported to an entirely Navy chain of command within the Pacific Ocean Areas (POA) Theater of War. A British carrier force supported the operation, making it a combined operation as well. other formation of comparable size can match the

integration of services and forces of Tenth Army on Okinawa. Even as the campaign was unfolding, the implications for future applications were being assessed. In an article written just seven days into the battle, the Army and Navy Journal included the following observation concerning the Tenth Army's organization:

It is possible that the new organization may be in the nature of a test force looking toward even a closer integration of all fighting components in the field.²

This statement is as true today as it was during the outset of the battle. As recent events in the Persian Gulf proved, major conflicts still require large unit operations to achieve decisive results. This in not a revelation.

History proves that the commitment of US Army forces to secure the interests of the United States often culminates with the employment of large ground units. To understand the implications of the Okinawa campaign for future doctrine and force structure, it is important to understand the development and historical significance of large unit formations within the framework of modern American warfare. A summary of this development clearly indicates the importance and the need for continued study and examination.

Historical Framework:

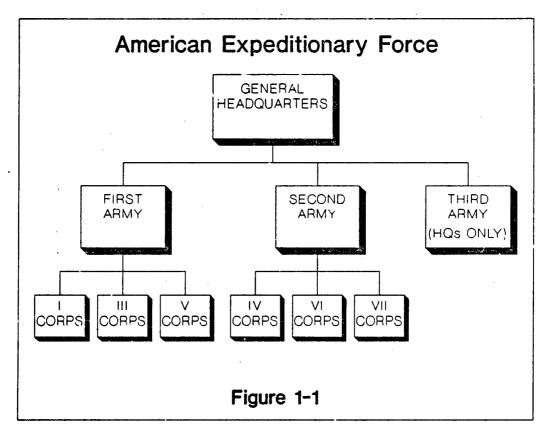
Every major conflict the United States Army has fought during this century has included combat operations at the field army level. In this context, Tenth Army operations in the Okinawa Campaign of 1945 constitute the only historical example of a joint field army headquarters which included corps size units of both the US Army and the Marine Corps. Given today's environment, it is entirely possible that a US Army corps and a Marine Expeditionary Force (a corps size unit of about 50,000) could be employed in a joint operation requiring a headquarters capable of performing field army functions. The following summary of this nation's major conflicts during this century shows the role large unit operations have played.

The roots of large unit operations extend back to the American Civil War. Prior to this, American military ventures were adequately controlled by a single army headquarters. Not until the mass mobilization caused by the Civil War was there a need for multiple theaters of war with the accompanying army headquarters. But these organizations did not exist at the outset of the war and it was not until later in the war that an efficient command structure was established. Ultimately, however, the Union force structure matured into a field force comprised of five armies under the single command of General Ulysses S.

Grant. This became the US Army's first experience in the employment of corps and field army size units. As Russel Weigley states, the Civil War "...molded the American Army's conception of the nature of full scale war. "5

The deployment of the American Expeditionary Force to France during World War I was the first opportunity in this century for the US Army to conduct large unit operations. It represents the first war in which all elements of today's combined arms were represented. Consequently, it marks the departure point for this study.

General John Pershing's early exposure to European armies greatly influenced the development of his own force in World War I. The armies of France, Germany, and Russia were organized into armies and groups of armies. By comparison, Pershing's force quickly grew from an initial requirement of twenty divisions into one with forty-three divisions organized into the First, Second, and Third Field Armies (Figure 1-1). Unlike his European allies, however, Pershing chose to retain operational control of his armies through a general headquarters rather than constituting an army group headquarters. Nonetheless, the army learned many lessons that would affect army organization and operations in World War II.

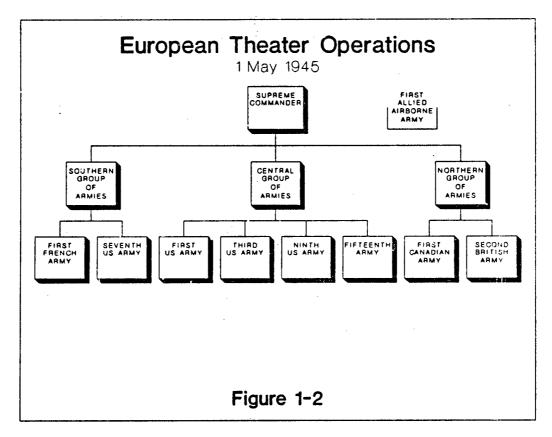


Source: Center of Military History, Order of Battle of the United States Land Forces in the World War, p. 7.

Pershing's elevation to Army chief of staff after the war had a direct impact on the development of army doctrine for large units. Although the Army's first attempt to publish doctrine for the employment of large units was a direct translation of French doctrine, it did publish its own doctrine in 1930. The War Department's Manual for Commanders of Large Units (Provisional) Volume I Operations included a definition of various echelons of commands to include field armies. The manual reflected Pershing's direct influence and experience and outlined an

organization for large unit formations similar to the organization of the AEF during World War I.⁹ This doctrine provided the basis for preparing the US Army for entry into World War II.

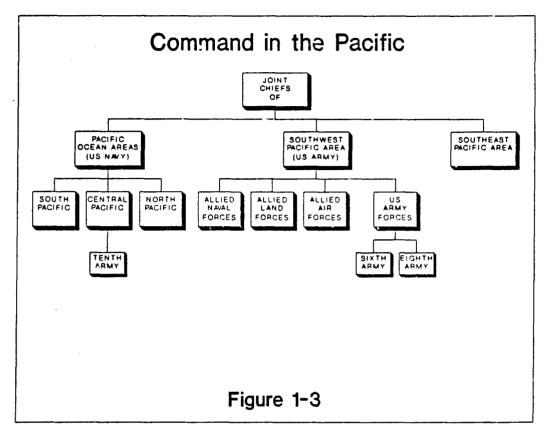
Based on its experience in World War I and its 1930 field manual on large units, the Army entered World War II with practical experience and a strategic and operational doctrine. The war saw the expansion of the US Army into a force which routinely raised and employed large formations. The Army displayed great organizational agility in managing and employing units at the field army, army group, and theater army levels in both the European and Pacific theaters of war. The rapidity of operations in the Mediterranean and European theaters of war required commanders to continually reorganize their forces into armies and army groups. In the European Theater of Operations, the process became almost routine. The growth of the allied forces in the European Theater of Operations illustrates this point. When allied forces invaded Normandy on 6 June 1944, the Allied Expeditionary Force consisted of five divisions organized into four corps, two field armies, and one army group. Within eleven months, it grew into a force of eighty-seven divisions, organized into twenty-three corps, nine field armies, and three army groups. 10 This accounting of forces does not



Source: Poque, The Supreme Command, p. 455.

include the forces of the Fifteenth Army Group fighting in Italy (Figure 1-2).

Although European operations were characterized by the integration of combined ground forces, there were no joint ground operations. Operations in the Pacific Theaters of War, on the other hand, differed significantly. Unlike the chain-of-command established in the war against Germany, command in the Pacific was shared between the two senior Army and Navy commanders. Consequently, two theaters of



Source: Morton, Strategy and Command, p. 254.

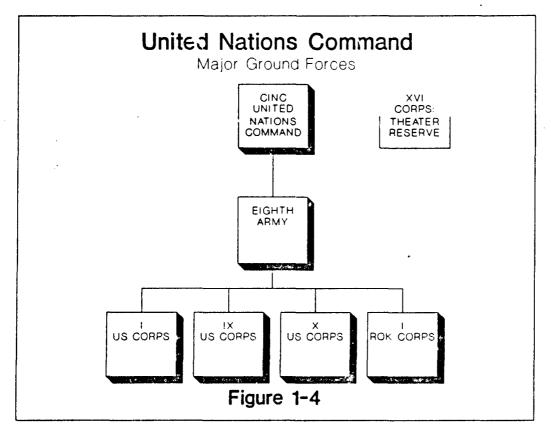
war were created to accommodate not only the senior commanders, but their respective services as well. 11 This arrangement caused well-documented problems of interservice rivalry. In short, the US Army and Navy shared responsibility for the war against Japan (Figure 1-3).

The nature of the Pacific War forced the services to work together as a team because neither service alone could muster the resources required to conduct large scale

operations. It was not until the last battle of the war that the services organized and employed a fully joint field army - the Tenth Army. It was one of only three field armies constituted in the Pacific and represented the progress made in three-and-a-nalf years to reduce inter-service rivalry. It set the standard for future joint operations that the services still seek today.

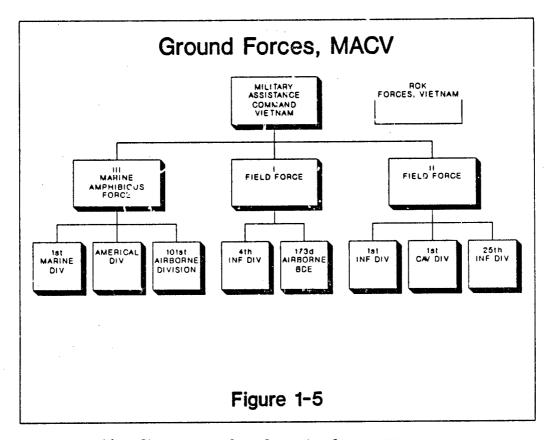
With the stand-down of forces after World War II, the Army found itself unprepared for the Korean War. Unlike World War II when senior army leaders foresaw and planned for the creation of large units, the Army's participation in the Korean War was a piecemeal effort. It grew from the small commitment of Task Force Smith into full combat operations of Eighth Army under the United Nations Command. It consisted of three US corps and one Republic of Korea corps (not including XVI Corps in theater reserve). The Eighth Army's organization was similar to the Tenth Army's in World War II, for it included both Army and Marine Corps ground elements. However, Marine involvement was substantially smaller in Korea, with only one Marine division assigned to the Army's X Corps. Organized as a field army, the Eighth Army provided many functions of a theater army as well. 12 It retains that characteristic today (Figure 1-4).

Non-doctrinal organizations characterized the Army in Vietnam. Although the mature theater organization



Source: Hq Eighth Army, Command Report, ACofS, G-3, bk. 4, pt. 1, 1 July 51.

resembled that of a doctrinal field army, a field army headquarters was not constituted. The decision not to form one stemmed from a departure in doctrine at the corps level where General William Westmoreland decided against organizing his ground forces into corps to preserve the preeminence of the Vietnamese corps and to preclude any confusion that could arise between separate corps operating in the same general area. 13 Consequently, field forces emerged as the intermediate headquarters between divisions



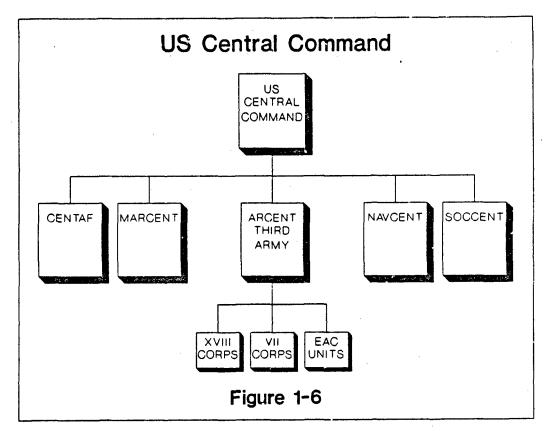
Source: Eckhardt, Command and Control, p. 83.

in the field and the headquarters charged with conducting the ground war, Military Assistance Command Vietnam (MACV - see Figure 1-5). Although field force operations were similar to corps in their hierarchical position, they served similar but different functions. Most significantly, field forces did not control all units within their sectors; instead, they arbitrated plans and activities. Similarly, General Westmoreland did not form a combined field army headquarters, because his intent

was to maintain the preeminence of the Vietnamese effort. The point, however, is that army operations grew to a level equal to that of a field army - three corps sized units including ground elements of the Army, Marines, and Vietnamese.

Many military operations before, during, and after Vietnam did not include field army operations but were joint operations nonetheless. The Lebanon Crisis of 1958, the Cuban Missile Crisis, Operation Powerpack into the Dominican Republic, and the invasions of Grenada and Panama all reinforce the importance of being able to conduct joint ground operations. Although limited in size and intensity, they validate the need for rapidly deployable forces trained and capable of operating in a joint environment.

Most recently, the Gulf War against Iraq grew from an initial division deployment into an operation which included the Third Army -- a field army consisting of the VII Corps and the XVIII Airborne Corps. Similar to the Eighth Army's role in Korea, Third Army functioned as a field army and a theater army. 16 It also retained responsibility as the component army as well. Although a combined formation, the Third Army was not a joint formation (Figure 1-6). Unlike many previous experiences, the Marines and the Army operated in separate but complimentary roles.



Source: Yeosock, "Army Operations in the Gulf," p. 2.

This summary serves to illuminate the fact that ground operations in each major conflict this country has fought have included operations at the field army level and, if this trend continues, it will again employ formations at the field army level.

Purpose:

The purpose of this thesis is to determine whether, at the operational level, there are lessons the US Army can learn from the Okinawa campaign that can be applied to joint field army operations. Secondary questions include the following:

- (a) What are the lessons learned that are applicable in today's environment?
- (b) To what extent was the Tenth Army staff a joint staff in its organization and functions?
- (c) Were operations conducted in a joint manner or were they separate service operations conducted under Army command?

Assumptions:

- (a) The US Army will conduct field army operations again.
- (b) Although field armies have traditionally been Army formations, there is no rescriction against Marine command or predominance in a field army headquarters.

Definition of Terms:

- (a). Field Army An operational headquarters formed by theater army commanders to control and direct the operations of assigned corps. It is normally constituted from existing army assets.
- (b). Joint A general term applied to a force composed of significant elements of two or more services operating under a single commander authorized to exercise operational control over the force.
- (c) Operational Operating Systems (OOS) The major functions performed by joint and combined forces for successfully executing subordinate campaigns and major operations in a theater of war or area of operations.

 There are six operational operating systems: movement and maneuver; fires; protection; command and control; intelligence; and support.
- (d) Battlefield Operating Systems (BOS) Systems today that provide a structure for integrating and synchronizing critical combat activities on the battlefield. There are seven battlefield operating systems: maneuver; mobility, countermobility, and survivability; fire support; air defense; intelligence; combat service support; and command and control.

Limitations:

Doctrine on field armies, army groups, and theater armies is still under development in FM 100-15.

Additionally, FM 100-5 is currently under revision. The lack of approved doctrine may limit the accuracy of analysis in terms of what is required for operational control of forces at echelons above corps.

Delimitations:

This thesis is not just a battle analysis. It is a study of field army level operations during a specific campaign to determine what lessons can be applied to emerging doctrines and command and control requirements.

Review of Literature:

- (a) Current State of Publications. There is an abundance of information about Okinawa. The Combined Arms Research Library (CARL) has many primary source documents in the archives which will provide the primary data for analyzing the operation from a joint perspective. In addition, there are many historical works which describe the Okinawa Campaign in general terms. These are helpful in looking at the campaign from a macro point of view.
- (b) Key Works. The single most important document to this research project is the three volume after action

report (AAR) submitted by Tenth Army in September 1945. It includes detailed accounts of the planning, organization, and employment of Tenth Army. Additional reports from subordinate units will be helpful in analyzing the operation using the operational operating systems as a framework. CARL has copies of the Tenth Army AAR and most of the subordinate reports.

- (c) Apparent Trends. All sources researched to date are consistent in their report of the operation to include the secondary sources. There are only a few minor discrepancies.
- (d) Topic Area. The notion that Okinawa is an ideal operation to study for its joint aspects is not new. There are several scholarly works that deal directly with this issue. However, their analysis is based on different criteria, and they tend to focus more on a chronological review of the battle rather than an in-depth analysis of possible applications.

Significance of the Study:

The Army is undergoing major changes to the way it is currently organized and how it intends to fight. Although it traditionally fights at the large unit level, force reductions may preclude the Army from quickly fielding a

cases, a feasible alternative may be to constitute a field army size formation consisting of an Army corps alongside a Marine Corps Expeditionary Force. If so, the complexity and lethality of modern combat will require tight command and control procedures to preclude the loss of friendly forces while maximizing the capabilities of each service. There are still many lessons to be learned from the only operation in history using a similar type force.

ENDNOTES

Chapter I

1"All Service," Army and Navy Journal, 7 April 1945, cited by Military Review (Vol XXX, Number 4, July 1945), p. 17.

²Ibid., p. 17.

³Gary L. Bounds, "Introduction," in <u>Larger Units:</u>
<u>Theater Army--Army Group--Field Army</u>, Combat Studies
Institute Report No. 6 (Fort Leavenworth, KS: Combat
Studies Institute, US Army Command and General Staff
College, 1985), p. 1-1.

4Ibid.

⁵Russel F. Weigley, <u>Eisenhower's Lieutenants</u>, vol. 1, (Bloomington: Indiana University Press, 1981), p. 3.

⁶Bounds, <u>Larger Units</u>, 1-2.

⁷Ibid., p. 1-1.

⁸Ibid., p. 1-3.

9_{Ibid}.

10Robert H. Berlin, "European Theater of Operations United States Army, World War II: Echelons Above Corps," in Larger Units: Theater Army-Army Group-Field Army, Combat Studies Institute Report No. 6 (Fort Leavenworth, KS: Combat Studies Institute, US Army Command and General Staff College, 1985), p. 3-1.

11George W. Gawrych, "Divided Command in the Pacific: SWPA and POA," in <u>Larger Units: Theater Army--Army Group--Field Army</u>, Combat Studies Institute Report No. 6 (Fort Leavenworth, KS: Combat Studies Institute, US Army Command and General Staff College, 1985), p. 4-1.

12 Scott R. McMichael, "Organization of Large Units During the Korean War," in <u>Larger Units: Theater Army-Army Group--Field Army</u>, Combat Studies Institute Report No. 6 (Fort Leavenworth, KS: Combat Studies Institute, US Army Command and General Staff College, 1935), p. 5-1.

13Gary H. Wade, "Vietnam: Command and Control," in Larger Units: Theater Army-Army Group-Field Army, Combat Studies Institute Report No. 6 (Fort Leavenworth, KS: Combat Studies Institute, US Army Command and General Staff College, 1985), p. 6-24.

¹⁴Ibid., p. 6-26.

¹⁵Ibid., p. 6-21.

16Lieutenant General John H. Yeosock, US Army, "Army
Operations in the Gulf Theater," Military Review,
(September 1991): p. 2.

Chapter II

Research Methodology

Introduction:

This chapter outlines in detail the specific methods and framework used to answer the question of whether, at the operational level, there are lessons the US Army can learn from the Okinawa campaign that can be applied to joint field army operations. The following is the research approach used to find the answer.

First, Chapter One sets the precedent for field army operations and concludes that if past trends continue, field army operations are a legitimate requirement that the US Army should plan for and expect. Chapter Two outlines the research methodology and explains the framework for analysis. It defines in detail the Blueprint of the Battlefield and the operational operating systems that provide the basis for examining the campaign. Chapter Three is a battle summary of the Okinawa Campaign from an operational perspective. Since there are many historical books and reports written on the battle, this study does not attempt to revise or rewrite the story. On the

contrary, it uses the battle as a starting point for a detailed examination of the campaign using the operational operating systems. The battle summary is general in scope and provides enough background for further examination in Chapter Four. Chapter Four uses the operational operating systems outlined in the Blueprint of the Battlefield as a basis for determining how well the Tenth Army fought on Okinawa. Chapter Five extracts the salient lessons learned from the analysis and concludes whether or not the Tenth Army is a model for today's requirements.

The use of operating systems as a framework for analyzing engagements and battles is an accepted method for determining how well a unit has performed. Each of the Army's Combat Training Centers, the National Training Center, the Joint Readiness Training Center, the Combat Maneuver Training Center, and the Battle Command Training Center, use them as a basis for after action reviews (AAR) from battalion through division level. AARs focus on how well a unit performed and what it can do better. Similarly, this study uses the operating systems as the framework for analysis, but focuses on the operational level instead of the tactical level. It will determine how well Tenth Army fought as a joint force and what lessons are still applicable to the current joint force structure.

The following section serves to explain the Blueprint of the Battlefield and to define the functions of the operational operating systems. It is purposely detailed because the operational operating systems are not used as widely as are the battlefield operating systems. It describes the Blueprint, shows the relationship of the battlefield operating systems to the operational and strategic operating systems, and outlines the framework used to analyze the Okinawa campaign.

Blueprint of the Battlefield

Definition:

TRADOC Pamphlet 11-9 outlines the Blueprint of the Battlefield and the operational operating systems. The Blueprint does not describe how the army fights, but it provides a framework for examining how well it fights. Accordingly, it provides the framework for analyzing the Okinawa Campaign in terms of how well the Tenth Army fought. Unlike the traditional campaign analysis model, the Blueprint allows for the detailed examination of battlefield functional areas. In order to understand the significance of this study's analysis, it is important to understand the Blueprint. The following section describes the Blueprint and defines the operating systems.

Background:

The Blueprint provides a common reference system for analyzing operations by commanders, combat & elopers, analysts, trainers, and planners. It is a tool for looking a battlefield functions at all three levels of war (strategic, operational, and tactical). Although the Blueprint was initially designed to assist analysts in combat development studies, it is just as applicable to the analysis of battles, campaigns, major operations, and strategic plans. It represents battlefield functions performed at all levels, applies to military operations across the operational continuum, and is applicable for all types of missions. As such, it is a standard for identifying battlefield functions and tactical tasks.

Structure:

The Blueprint does not organize battlefield functions along the traditional lines of combat, combat support, and combat service support, nor does it organize functions along branch or service lines.⁵ Instead, the Blueprint focuses specifically on each level of war and is organized by operating system. Operating systems are the major functions necessary for successfully executing operations at each level of war.⁶ They are the broad categories of tasks and actions which encompass each operation

regardless of whether it is an offensive or defensive mission.

Operational Blueprint:

The remainder of this section describes the organization of the operational Blueprint of the Battlefield, defines the major functions, and lists the associated sub-functions of each operating system.

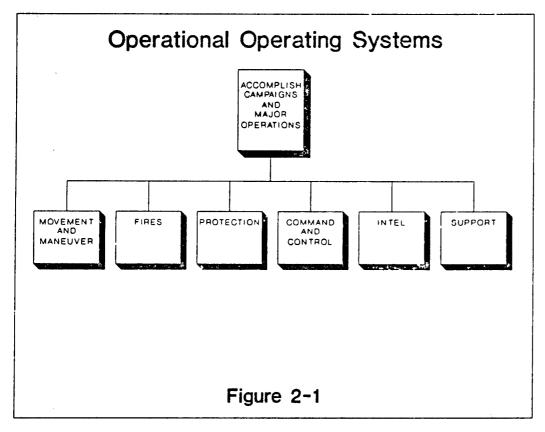
Description:

There are six operational operating systems (Figure 2-1). Operational operating systems are those functions performed by joint and combined operational forces for conducting campaigns and major operations in theater of war or theater of operations. Figure 2-1 is headed by a single box which states the primary purpose of operations conducted at the operational level of war. Beneath the purpose are the operating systems which must be successfully performed in order to accomplish campaigns and major operations. Each of the operating systems include the functions required to adequately address each of the systems. Subsequent figures include these functions

Operational Operating Systems

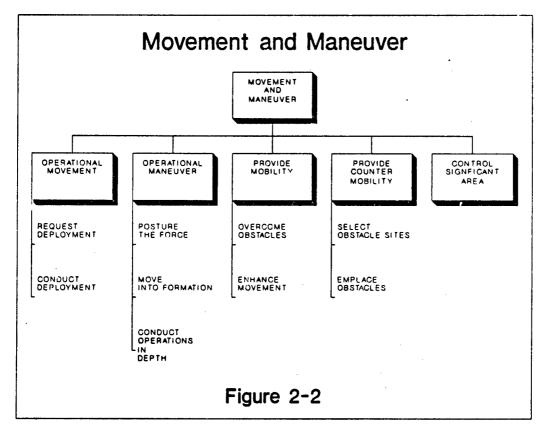
The remainder of this section is taken from TRADOC

Pamphlet 11-9. The description of each operating system is



Source: TRADOC Pamphlet 11-9, "Blueprint of the Battlefield," p. 6-1.

paraphrased, whereas the definition of key functions contain only minor changes from the original text. Minor changes include the removal of redundant phrases. The accuracy of these definitions is key because they are the standard against which the performance of the Tenth Army will be assessed. Thus, they are presented in this section prior to making that assessment.⁸



Source: TRADOC Pamphlet 11-9, "Blueprint of the Battlefield," p. 6-3.

Operational Movement and Maneuver:

Operational movement and maneuver (Figure 2-2) is the disposition of forces to create a decisive impact by either securing positional advantage before the battle begins or exploiting tactical success to achieve operational results. Operational movement and maneuver includes those functions which facilitate movement of forces without delay. It includes preventing the enemy from seizing positional advantage by delaying movement and

maneuver and includes sea, land and air operations. More specifically, operational movement is the act of deploying or regrouping forces. It normally requires the operational commander to request and coordinate additional assets to move the force within or into the area of operation (AOR). However, it is also the operational commander's responsibility to synchronize the timing of and sequencing the movement to fit the concept of the operation. Operational movement includes the shifting of forces within the AOR to accomplish additional missions. Operational maneuver seeks to exploit enemy weaknesses by attacking the enemy's centers of gravity. It includes identification of the form of maneuver and the type of offensive operation. During operational maneuver, the commander prepares the battlefield for future operations. This may include conducting operations that fall under the category of another operating system.

Pefinitions of Key Functions:

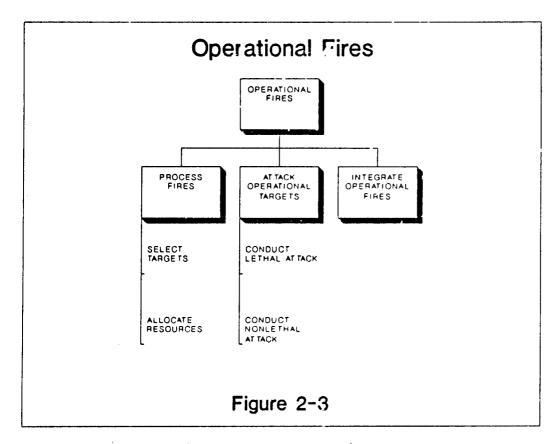
<u>Conduct Operational Movement</u>. To regroup, deploy, shift, or move formations within the theater of operations from less threatened or less promising areas to more decisive positions elsewhere by any means or mode.

<u>Conduct Operational Maneuver</u> To deploy operational forces into battle formations and to extend forces to operational depths for achieving a position of advantage over the enemy for accomplishing operational or strategic objectives.

Provide Operational Mobility. To facilitate the movement of formations in a campaign or major operation without delays due to operationally significant terrain or obstacles.

Provide Operational Countermobility. To delay, channel, or stop offensive air, land, and sea movement by enemy operational formations in order to help create positional advantage for friendly forces and expose enemy centers of gravity or high payoff targets for destruction in conformance with the operational commander's plans and intent.

Control operationally Significant Area. To dominate the physical environment whose possession provides either side an operational advantage, thus denying it to the enemy by either occupying the operationally key area itself or by limiting the enemy's use or access to the environment or area.



Source: TRADOC Pamphlet 11-9, "Blueprint of the Battlefield," p. 6-3.

Operational Fires:

Operational fires (Figure 2-3) is the application of firepower to support the movement and maneuver of operational forces and to achieve a decisive impact on the operation. Operational fires include all means of delivering ordnance and so, by definition, are joint. Although operational fires support maneuver, it is a co-equal operation system with movement and maneuver and requires synchronization to maximize the effects of each.

Operational fires do not constitute fire support because fire support focuses at the tactical level and, unlike tactical maneuver, operational maneuver may not require the support of operational fires

The operational fires operating system includes the functions of processing targets, attacking targets, and integrating fires. Theater air forces often provide operational fires. Naval surface delivery systems can also provide operational fires. Operational fires are designed to achieve one or more of the following:

- Facilitate maneuver by creating an exploitable gap in tactical defenses.
- Isolate the battlefield by the interdiction of uncommitted enemy forces.
- Destroy critical functions having operational significance (for example, logistics bases and communications nodes).

Definitions of Key Functions:

<u>Process Operational Targets</u>. To select land, sea, and air targe+s of major/decisive impact on campaigns and major operations and match appropriate joint or allied operational fires.

Attack Operational Targets. To enter into conflict with the enemy to destroy operational level targets and to shape and control the tempo of the campaign using all available operational fires assets against land, air, and naval targets having operational significance.

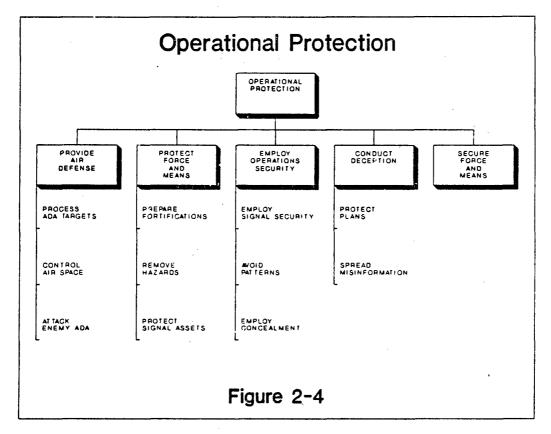
<u>Integrate Operational Fires</u>. To integrate fires on single or multiple targets at the decisive time and place. This integration includes lethal or non-lethal means of attack.

Operational Protection:

The purpose of operational protection (Figure 2-4) is to conserve the fighting potential of a force for commitment at the decisive time in the operation. Actions may include limiting the effectiveness of enemy firepower by limiting his ability to locate, strike, and destroy operational formations and major logistical centers. It includes protection from enemy operational maneuver, and air, sea, and ground attacks. Protection includes plans and measures taken to reduce the risk of natural occurrences such as adverse weather.

Definitions of Key Functions:

<u>Provide Operational Air Defense</u>. The protection of forces from air attack through both direct defense and destruction of the enemy's air attack capacity in the air. It includes



Source: TRADOC Pamphlet 11-9, "Blueprint of the Battlefield," p. 6-7.

such measures as use of aircraft, air defense artillery, non-air defense weapons in the air defense role, and electronic countermeasures.

Provide Protection for Operational Forces and Means. To safeguard own centers of gravity and force potential by reducing or avoiding the effects of enemy operational level actions.

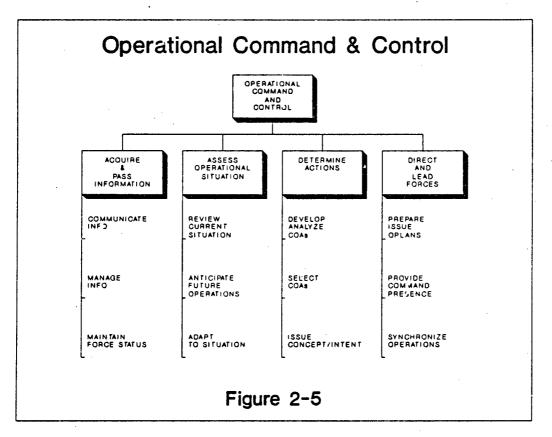
Employ Operations Security. To take action to avoid friendly force indicators associated with planning and conducting campaigns and major operations from the enemy commander's perspective, thus protecting friendly intentions.

Conduct Deception. To manipulate enemy operational commander's perceptions and expectations into a false picture of reality that conceals friendly actions and intentions until it is too late for enemy forces to react effectively.

Provide Security for Operational Forces and Means. To enhance freedom of action by identifying and reducing friendly vulnerability to hostile acts, influence, or surprise. It includes measures to protect from surprise, observation, detection, interference, espionage, and sabotage. This function includes actions for protecting and securing the flanks of operational formations and protecting and securing critical assets.

Operational Command and Control:

Operational Command and Control (Figure 2-5) is the exercise of authority and direction by a properly designated commander over assigned forces to accomplish a



Source: TRADOC Pamphlet 11-9, "Blueprint of the Battlefield," p. 6-10.

mission. Command and control (C2) is accomplished by efficiently orchestrating the effects and capabilities of personnel, equipment, facilities, and procedures in planning directing, coordinating, and controlling forces. Operational C2 often requires a joint staff to ensure the proper synchronization of multi-service units. Critical elements include the assignment of missions, resources, and the establishment command relationships. Attacking the enemy's C2 structure is a key element of the C2 operating system.

Definitions of Key Functions:

Acquire and Communicate Operational Level Information and Maintain Status. To gain possession of information on the military objective, enemy operational forces and centers of gravity, friendly operational forces, and terrain and weather by or for the commander or his staff, to translate that information into usable form, to retain, and to disseminate it. This function may require commanders to interface with enemy civilian government officials in their AOR.

Assess Operational Situation. To continuously evaluate information received through reports or the personal observations of the commander on the general situation in the AOR.

<u>Determine Operational Actions</u>. To conduct the process of making detailed staff estimates and decisions for implementing the commander's plan and associated sequels.

<u>Direct and Lead Subordinate Forces</u>. To establish a command climate which provides direction to subordinates so that they understand their mission and military objectives and contribution to attainment of the commander's concept and intent. It includes maximum decentralized conduct of the

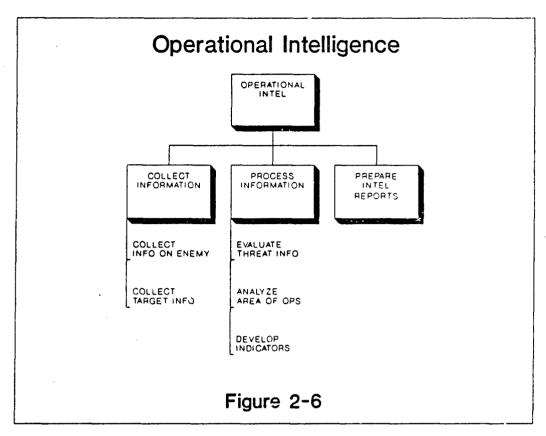
plan, either detailed or mission-type plans and orders as time and situation permits, latitude for subordinate innovative risk, taking and exploitation of opportunities.

Employ Command, Control, Communications Counter measures.

To integrate the use of operational security, military deception, jamming, and physical destruction, supported by intelligence, to deny information, to influence, degrade, or destroy enemy command, control, and communications capabilities and protect friendly C2 against such actions.

Operational Intelligence:

Operational intelligence (Figure 2-6) is the collection of intelligence required to plan and conduct major operations and campaigns. Operational intelligence focuses on identifying enemy centers of gravity that, if successfully attacked, will directly contribute to the success of the operation. Intelligence must include a personality profile of the opposing commander. Although enemy order of battle, doctrine, and analysis of the area of operations is important, operational intelligence must go beyond this level and analyze how the enemy operational commander sees the campaign unfolding. Most importantly, the intelligence estimate must not be overly optimistic about friendly plans, intentions, and capabilities.



Source: TRADOC Pamphlet 11-9, "Blueprint of the Battlefield," p. 6-13.

Definitions of Key Functions:

<u>Collect Operational Information</u>. To gather information from operational and tactical sources relative to threat operational forces and their centers of gravity and to the nature and characteristics of the assigned area of operations.

<u>Process Operational Information</u>. To convert operational information into intelligence through collation, evaluation, analysis, integration, and interpretation.

<u>Prepare Operational Intelligence Reports</u>. To formulate operational intelligence estimates and reports on the threat situation, intentions, vulnerabilities, targets, and other appropriate intelligence reports.

Operational Support:

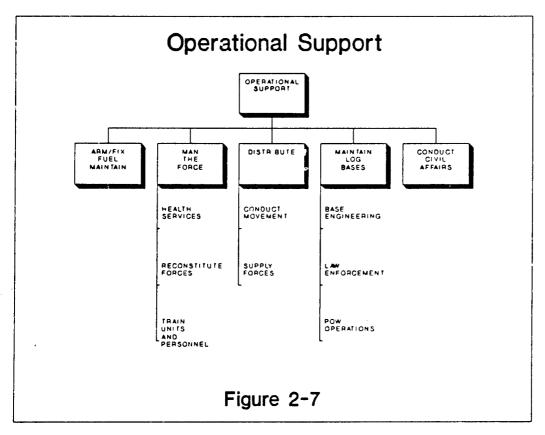
Operational Support (Figure 2-7) is the logistical support necessary to sustain the force. It includes the activities from the sustaining base to the CSS units of the committed tactical units. Most always, it is a joint operation. Operational support differs from tactical CSS in the quantities of the supplies and services and the duration of the support.

Definitions of Key Functions:

Arm. To provide for the replenishment of arms, ammunition, and equipment.

Fuel. To provide for the uninterrupted flow of fuel.

Fix/Maintain Equipment. To provide for establishment of facilities in rear areas for the repair and replacement ofmateriel and the establishment of policies on repair and evacuation of equipment.



Source: TRADOC Pamphlet 11-9, "Blueprint of the Battlefield," p. 6-15.

Manning the Force. To provide the uninterrupted flow of trained and organizationally sound army units and replacements and to provide necessary personnel and health services.

<u>Distribute</u>. To maintain the timely flow of stocks (in all classes and large quantities and services.

Maintain Sustainment Bases. To build and maintain principal and supplementary bases of support.

Conduct Civil Affairs. To conduct operations which embrace the relationship between military forces and civil authorities and people in a friendly country or area when military forces are present.

ENDNOTES

Chapter II

Department of the Army, "Blueprint of the Battlefield," TRADOC Pamphlet 11-9, (Ft. Monroe, VA: US Army Training and Doctrine Command, 15 February 1991), p. 3-6.

²Ibid., p. 2-2.

³Ibid., p. 1-1.

⁴Ibid.

⁵Ibid., p. 2-1.

⁶Ibid.

7_{Ibid}.

⁸Except where noted, the information on operational operating systems is from TRADOC Pamphlet 11-9, "Blueprint of the Battlefield," and will be cited again only by exception.

Chapter III

Battle Summary

of

the Okinawa Campaign

Strategic Setting:

During the 1943 Trident Conference in Washington, the American and British coalition refined the general strategy for prosecuting the war against Japan. Among other things, it called for a double envelopment of the Japanese mainland by US forces across the Central Pacific and Southwest Pacific. Strategically sound, the plan also accommodated the personalities of the senior commanders in each theater of war. The strong personalities of General Douglas MacArthur and Admiral Chester Nimitz added to the intense rivalry that already existed between the services. Although Nimitz's theater was designated the main effort, he was tasked with supporting MacArthur's drive across the Southwest Pacific with his carrier task forces. Navy support of MacArthur's operations began the inter-service

cooperation that allowed the Americans to conduct the largest amphibious operation in the Pacific, the invasion of Okinawa - Operation ICEBERG.

The invasion of Okinawa, however, was not always part of the concept for attacking the Japanese mainland.

Initially, the Joint War PLans Committee (JWPC) envisioned the double envelopment "linking up" at Formosa. The Chief of Naval Operations and Commander-in-Chief US Fleet,

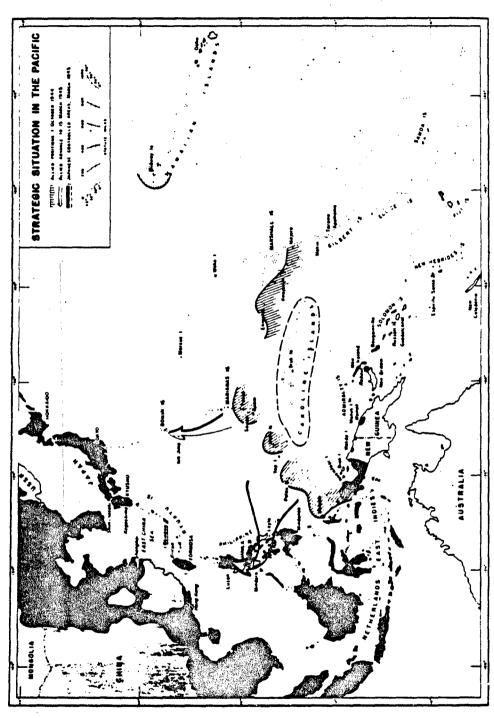
Admiral Ernest J. King, strongly supported this concept.

The JWPC plan placed emphasis on naval operations across the Central Pacific as the main effort and discounted the need for seizing the Philippine island of Luzon. However,

MacArthur's operational success in the Southwest Pacific Area (SWPA) created a need to reevaluate this strategy.

Coupled with his argument that Formosa could not be taken without first securing Luzon, MacArthur received the "go-ahead" to take the Philippine Island.

Other events changed the strategic situation and helped resolve the emotional argument between the commanders of the two theaters (Map 3-1). A major Japanese offensive in China dispelled the idea that strategic air assets could be stationed in China for the air campaign against the Japanese mainland. Furthermore, the seizure of airbases in the Marianas alleviated the need for the bases



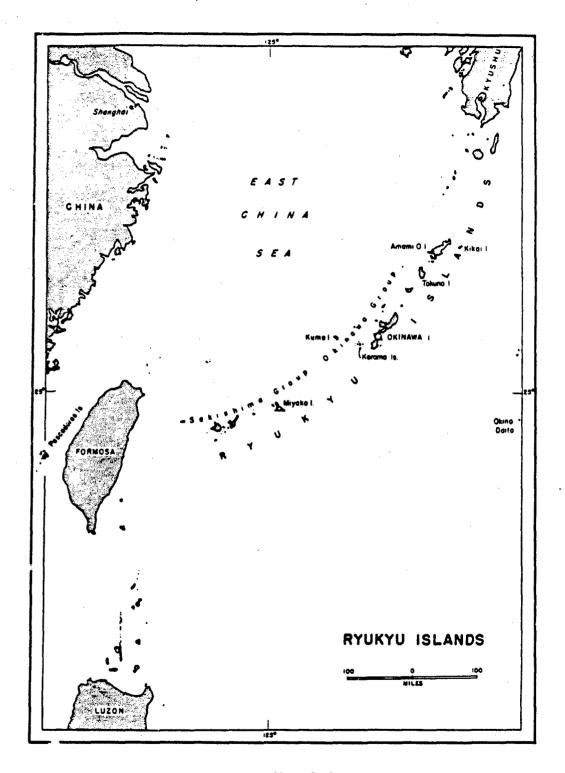
Map 3-1

Source: Appleman, Okinawa: The Last Battle, p. 3.

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in China. Additionally, the inability of the Nationalist Chinese Army to advance up the Chinese coast killed the idea that the strategic drive could include a ground threat on the Chinese mainland. In light of these developments and the fact that additional ground forces from the European Theater would not be available, support for the invasion of Formosa gradually decreased and the Navy looked for other options. 4

During discussions in July 1944, Vice Admiral Raymond A. Spruance presented Admiral Nimitz an option for breaking the strategic impasse. Spruance suggested that a continued attack across the Pacific on a line through the Bonins to the Ryukyu Islands (the island chain that includes Okinawa-see Map 3-2) would create an opportunity to achieve the same objectives as taking Formosa. It would cut the Japanese lines of communication to the south and provide bases for the strategic air campaign against Japan. Key to this cption was a need for protected anchorages for the transfer of ammunition. When briefed on this option, Admiral King quickly incorporated this need for transfer points into his continued argument for the invasion of Formosa. By this time however, King's subordinate commander in the Pacific, Nimitz, was less than enthusiastic about the need for taking Formosa.5 Additionally, JWPC planners concluded that the Japanese



Map 3-2
Source: Appleman, Okinawa: The Last Battle, p. 4.

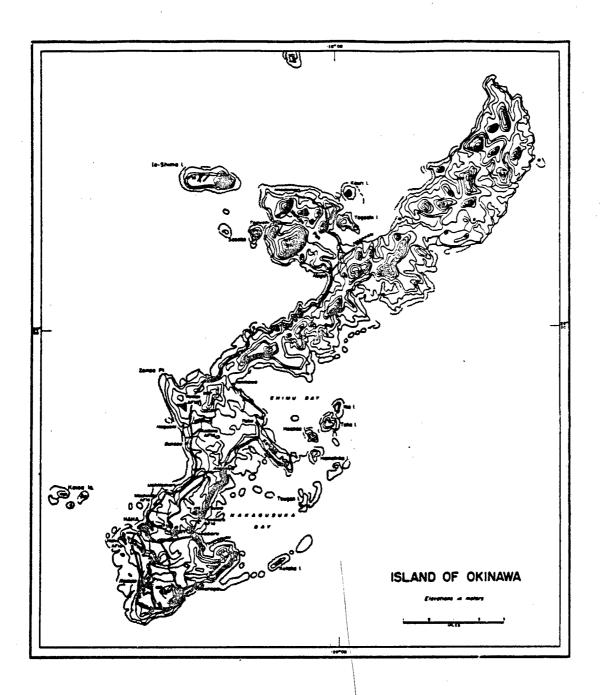
island of Kyushu must be seized by amphibious assault prior to assaulting the main Japanese island of Honshu. This planning requirement supported the idea of seizing Okinawa because of its proximity to Kyushu.

Although the Formosa option was still on the agenda during the Octagon Conference in late September 1944, the lack of additional army ground forces sealed its fate as a viable option. The fact that existing ground forces in the Pacific were sufficient for a campaign through the Bonins and Ryukyus made the decision that much easier. King accepted his subordinate's argument for seizing the Bonins island of Iwo Jima and the Ryukyus' island of Okinawa and gave his consent to the Joint Chiefs of Staff (JCS) for approval. Thus, Okinawa became the focus of Pacific strategy for the final push towards Japan when the JCS incorporated Operation ICEBERG into its planning guidance issued on 3 October 1944.

Analysis of the Ryukyus Area of Operations:

The attack on Okinawa as a viable alternate course of action to the invasion of Formosa depended on the adequacy of its geographic and operational features (Map 3-3).

Although its general location was of strategic importance, just as important was whether or not its specific characteristics would allow a major naval and ground



Map 3-3

Source: Appleman, Okinawa: The Last Battle, p. 8.

campaign. An analysis of the area of operations shows that it was more than adequate for both. The Ryukyus Islands are part of the Nansei Shoto group of islands and stretch approximately 800 miles between Formosa and Japan. Okinawa is the largest of the Ryukyus Islands and encompasses some 465 square miles. It is 60 miles long but only 2 miles wide at its narrowest point, with a breadth of 18 miles at its widest point. Okinawa separates the East China Sea from the Pacific Ocean.

A major planning factor focused on straight line distances from other key locations. From Leyte Gulf, the closest major logistics hub, Okinawa is 900 miles. Just as significantly, it is 3,300 miles from Espiritu Santo, the location of the only available strategic reserves. 9

Operationally, Okinawa rests only 350 miles from the Japanese island of Kyushu. Not only did this put American forces within range of aircraft based at Kyushu, it put them in range of additional Japanese aircraft that could use Kyushu as a refueling base. This proximity also provided the Japanese an opportunity to use what few fleet assets remained.

Okinawa had many militarily significant characteristics which supported the planned operation.

Most importantly, it included two major fleet anchorages and five major airfields (not including the one on

the island of Ie Shima, two miles off of the west coast).

These, and its proximity to Kyushu, were the most compelling reasons for taking the island. 11

Just as important, the terrain on Okinawa supported plans for a major ground campaign even though parts of the island were not well suited for ground maneuver. The island consisted of two significantly different types of terrain. The southern half, beginning with the island's narrowest point at the Ishikawa Isthmus, was best suited for ground operations and included the features necessary for future operations against the Japanese home islands. It was characterized by low, rolling ground suitable for airfield construction. It contained the five airfields already mentioned, the port of Naha, and the naval anchorage of Nagusuku, a former base for Japanese naval operations. Additionally, the western coast of the southern half of the island included an ideal landing beach of about 9,000 yards. 13

The northern half of the island, on the other hand, was extremely rugged, undeveloped, and almost without roads. A major ridge ran through the center portion and dominated all possible landing beaches. This rugged terrain precluded the development of any portion of this part of the island into airfield or port facilities. 12

A key chain of satellite islands 17-20 miles west of Okinawa was Kerama Retto. These generally hilly islands contained a partially sheltered anchorage that was key to conducting logistical operations in support of the operation. In all the chain could support 44 shipping berths and facilities for a floating repair base, a seaplane base, and an ammunition transfer point. For these reasons, the Kerama Retto became a key objective prior to the actual invasion of Okinawa. 14

Although the area seemed geographically ideal, it was not without risk. The Japanese island of Kyushu, located just 350 miles north of Okinawa, had 55 airbases. Just 365 miles to the southeast, Formosa, still in Japanese hands, had an additional 65 airbases. These bases, to include numerous others within the Ryukyus Retto, provided the means by which the Japanese could employ 3,000 to 4,000 land-based aircraft against the invasion. To counter this dangerous threat, US forces would have to rely exclusively on carrier based aircraft until air bases could be captured and air assets moved forward. This would give the Japanese a definite advantage during the initial stages of the campaign.

One final consideration that could adversely impact the plan was the size of the civilian population on Okinawa. Unlike previous operations in the central Pacific, there was a sizeable civilian population on the

island. The estimated half-million occupants would require a massive increase in logistical support as well as an extensive effort to emplace a military government to control them. 15

The Defense of Okinawa:

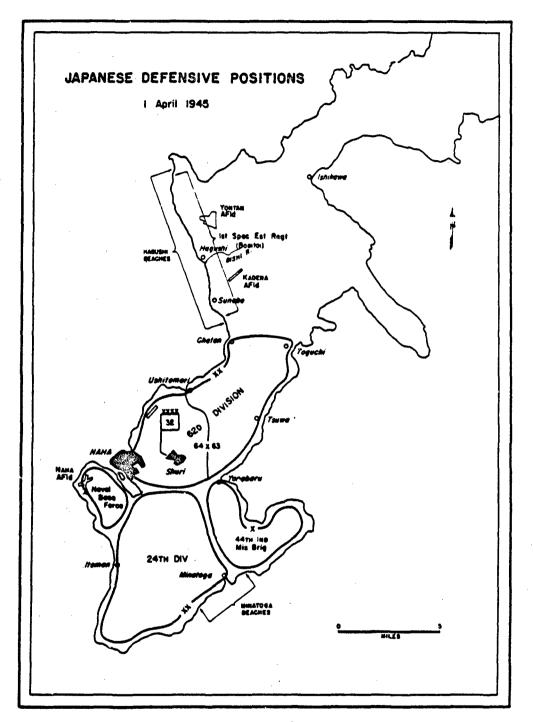
Since the summer of 1944, the newly organized Japanese 32d Army garrisoned Okinawa and planned for its defense. 16 Including reinforcements prior to the invasion, intelligence analysts estimated the Japanese strength at approximately 87,000 troops. 17 This was close. At the time of the invasion, the total strength of the Japanese 32d Army was approximately 100,000 troops. This number is somewhat misleading because of the composition of the Japanese force. It included 67,000 troops of the Imperial Japanese Army (IJA), 9,000 sailors from the Imperial Japanese army (IJA), end an additional 24,000 Okinawans impressed into mostly combat support roles. 18

The 32d Army included four major subordinate formations; the 24th Division with a strength of 14,360, the 62d Division with 11,623, and the 44th Independent Mixed Brigade with an additional 4,485. An additional 1,675 comprised the headquarters element and direct service units. This accounts for only 38,000 of the Army's

67,000. The remainder was organized into anti-aircraft units, sea-raiding, and airfield battalions. 19

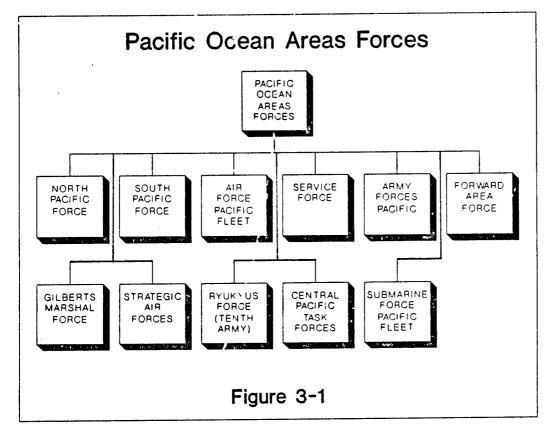
Based on the rapidly changing strategic situation, the 32d Army lost operational control of the 9th Division. It was withdrawn in November 1944 and redeployed to the defense of the Japanese mainland. The Japanese Imperial General Headquarters (IGHQ) promised to replace it with the 84th Division, but quickly changed its position as the threat to the Japanese homeland increased. This significantly reduced the chance of success for the 32d Army and affected the 32d Army's operational plans for the defense of the island.²⁰

Based on the availability of forces, the 32d Army defensive plan changed several times. The final plan organized the main defensive effort in the southern half of the island (Map 3-4). Here, the Japanese planned to establish their main defense along the line Naha, Shuri, Yonabaru. Significantly, the Japanese planned to oppose the assault landings only if they were conducted south of the main defensive line. 21 This concept for the defense of Okinawa was completely out of line with what Us planners anticipated. It would force a major adjustment to the Tenth Army campaign plan.



Map 3-4

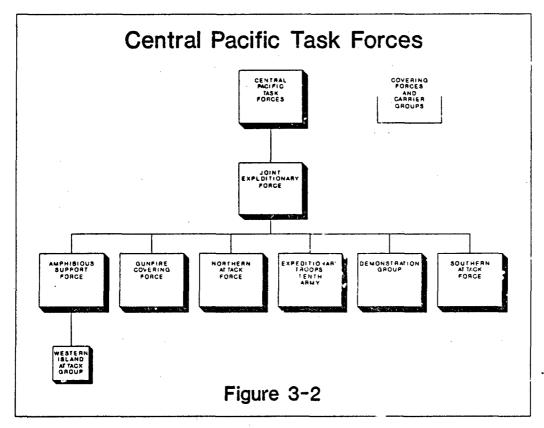
Source: Appleman, Okinawa: The Last Battle, p. 93.



Source: Appleman, Okinawa: The Last Battle, p. 21.

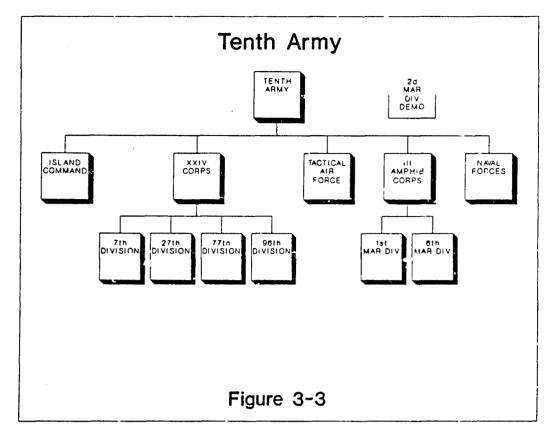
The US Command Structure:

The command structure for the Okinawa campaign was entirely within the Pacific Ocean Areas (POA) under the command of Admiral Chester Nimitz (Commander-in-Chief Pacific Ocean Area - CINCPOA - see Figure 3-1). Directly subordinate to Nimitz, Admiral Raymond A. Spruance commanded the Central Pacific Task Forces and was tasked with overall responsibility for the initial phases of the Ryukyus campaign (Figure 3-2). He would remain in command



Source: Appleman, Okinawa: The Last Battle, p. 22.

of all forces until the Expeditionary Troops (Tenth Army) were ashore and had secured their initial objectives. At that time, LTG Simon B. Buckner, commander, Tenth Army, would assume command and responsibility for the campaign. Along with the shift of responsibility, command lines would also change. Buckner would report directly to Nimitz and Spruance would undertake a supporting role. To date, amphibious commanders had retained command and control of land forces until major objectives were secure. For this



Source: Appleman, Okinawa: The Last Battle, p. 23

operation, Nimitz personally changed the procedure because the extended nature of the campaign required a single commander for its duration. This is a key point for it made Buckner the operational commander for most of the campaign. 23

Tenth Army was a unique formation (Figure 3-3). It included corps size units of both the US Army and Marine Corps, the Tenth Army Tactical Air Force under the command of Marine Corps Major General Francis P. Mulcahy, and the Island Command Task Force, a corps size logistical

organization that included elements of every service. CINCPOA assigned 116,000 troops to the initial assault phase with a follow-on strength that reached 183,000.²⁴ When fully deployed, Tenth Army would have seven combat divisions under its control and an additional division held in strategic reserve under the control of CINCPOA.

The Plan for Operation ICEBERG:

The JCS issued the operational directive for Operation ICEBERG on 3 October 1944. Three short weeks later on 25 October CINCPOA issued his plan to subordinate commands. Several factors assisted CINCPOA's accelerated planning. First, his staff adopted planning already conducted for the invasion of Formosa to the invasion of Okinawa. Second, co-location of the POA staff with other subordinate staffs alleviated the need for costly trips between headquarters. Tenth Army matched CINCPOA's efforts and published the Army plan on 6 January 1945.²⁵

The mission assigned to Tenth Army by CINCPOA follows:

The Tenth Army, as Expeditionary Troops, initially under command of the Commander Joint Expeditionary Force, will assist in the capture, occupation, defense, and development of Okinawa Island and establishment of control of the sea and air in the NANSEI SHOTO (RYUKYU) Area; with the eventual aim of extending control of the NANSEI SHOTO by capturing, defending, and developing additional positions. 26

Based on this mission, Tenth Army devised a three phased operation. Phase I dealt with preliminary operations aimed at preparing the area for the arrival of the main body of the invasion force and the first stages of the assault on Okinawa. Tenth Army planned to accomplish the following tasks during phase I:

- (1) Capture Kerama Retto six days before the assault landings on Okinawa. Establish logistics anchorage.
- (2) Capture Keise Jima eight miles west of landing beaches one day prior to invasion day, Love-Day (L-1). Emplace two battalions of 155mm howitzers to support assault landings.
- (3) Assault and capture southern part of Okinawa south of the Isikawa Isthmus.
- (4) On order, capture small island of Tonacki Jima 30 miles west of Okinawa.²⁷

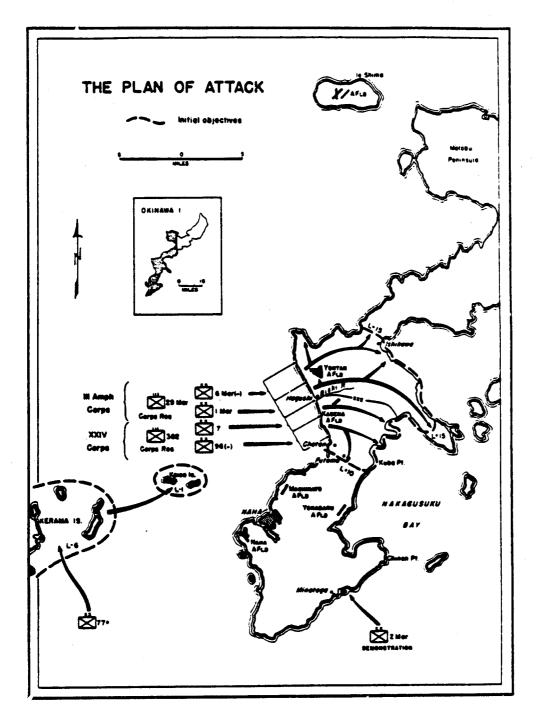
The purpose of phase II was to complete the destruction of the Japanese 32d Army, presumed to be at the northern end of the island. Specific tasks included:

- (1) Capture the island of Ie Shima.
- (2) Capture the Motobu Peninsula and destroy the main body of the Japanese 32d Army. 28

Finally, phase III addressed the last portion of the Tenth Army mission and directed operations against other islands within the NANSEI SHOTO:

- (1) On order, capture Myako Jima, 150 miles southwest of Okinawa.
- (2) On order, capture Kikai Jima, 170 miles northwest of Okinawa.²⁹

The following is a synopsis of the scheme of maneuver Tenth Army planned to execute in accomplishing these tasks (Map 3-5). Once preliminary operations had secured the area of operations surrounding Okinawa, Tenth Army planned to conduct a frontal assault with two corps abreast to seize landing beaches in the vicinity of Hagushi on the west-central side of the island. III Amphibious Corps would be in the north and the US Army XXIV Corps would be in the south. Each corps would lead with two divisions. In essence, Tenth Army's assault wave would consist of four divisions. From north to south, the divisions abreast would encompass the 1st Marine Division, the 6th Marine Division, the 7th Infantry Division, and the 96th Infantry Division. The 27th Infantry Division represented the operational floating reserve. The 81st Infantry Division, as strategic reserve, would remain under the operational control of CINCPOA.



Map 3-5

Source: Appleman, Okinawa: The Last Battle, p. 30.

Once ashore, ground units would advance to the east side of the island, cutting it in half and preventing lateral reinforcements by the 32d Army. During the drive to the eastern side, the 1st Marine Division was tasked with maintaining contact with the left flank of the XXIV Corps. 30

The plan then directed III Amphibious Corps to move north and secure an east-west line across the Ishikawa Isthmus to prevent the movement of forces south. III Amphibious Corps' maneuver would then protect the left flank and rear of XXIV Corps at it turned to the south to defeat Japanese forces. Destruction of enemy forces in the southern part of Okinawa would mark the completion of Phase I.

A shore-to-shore amphibious operation to seize the island of Ie Shima marked the beginning of Phase II of the operation. Once secure, a second shore-to-shore amphibious operation was planned to seize the Motobu Peninsula. This would set the stage for a major drive north and the destruction of the Japanese main defenses. Phase II would end with the destruction of the Japanese 32d Army. 33

Consolidation and reorganization of the island were the major tasks outlined in phase III. In addition, several on order missions were planned to extend control of the air and sea outside the immediate vicinity of Okinawa.

Summary of the Operation:

Operations of the Okinawa Campaign began on 17 March 1945 with extensive air and surface strikes against key targets throughout the entire area of operations. In conjunction with these attacks, major targets on the Japanese homeland and on Formosa were also attacked. Naval bombardment and fire support groups arrived in the vicinity of Okinawa on 25 March and began the systematic destruction of enemy defensive positions. 34 Simultaneously, underwater demolition teams began reconnoitering the beaches and mine sweepers cleared the lanes for the assault force. 35

On 27 March, the 77th Infantry Division assaulted Kerama Retto and began systematically destroying enemy resistance. The operation lasted five days with the 77th Division suffering relatively light casualties. Soon after the Army consolidated in the Kerama Retto, Navy support units initiated the installation of its advanced fleet anchorage. A key aspect of the Kerama Retto operation included the discovery and destruction of more than 300 fast attack suicide boats hidden in caves and inlets throughout the Kerama Retto. Each boat contained an explosive charge of about 200 pounds. The discovery precluded their use and any assessment of their utility. See Island was occupied on 31 March and two 155mm field artillery

battalions of the 420th FA Group were emplaced to provide covering fire for the main amphibious assault on Okinawa. 37

Prior to the actual assault, the 2d Marine Division
(III Amphibious Corps reserves) conducted a feint against
the southwestern beaches on 1 and 2 April. The division
went through the rigorous process of embarking in AMTRACs
and moved towards shore before turning around. Although the
deception measure diverted Japanese air assets, the maneuver
did not force any adjustment of Japanese ground forces.³⁸

On the evening of 31 March-1 April, more than 1,300 ships of all sorts arrived in the objective area off the westerr coast of Okinawa. Supported by massive carrier launched air strikes, naval gunfire, and artillery emplaced on Keise Island, the assault moved shoreward on schedule at 0830 hours with no resistance. In accordance with the operations plan, Tenth Army, consisting of two corps abreast, each with two divisions abreast, conducted a frontal assault on an eight mile stretch of beach centered on the town of Hagushi. 40

The advance inland progressed rapidly. Regiments in the initial assault force encountered little or no resistance and quickly overran the Kadena and Yontan airfields. The advance continued ahead of schedule with III Amphibious

Corps capturing the east coast town of Yaka and XXIV Corps capturing the town of Kuba by 4 April. Operations continued with the 7th Infantry Division seizing Yonagusuku on 6 April. The success of these initial operations put Tenth Army days ahead of schedule and allowed the Headquarters, Tenth Army Tactical Air Force to set up operations at the captured airfields. By 6 April, a Marine air group was operating from each of the airfields. 41

Once across the island, III Amphibious Corps turned north. Based on updated intelligence provided by local inhabitants and tactical reconnaissance, LTG Buckner altered the original Tenth Army plan. Instead of attacking south with the XXIV Corps during phase 1, he ordered III Amphibious Corps to continue its advance to the north. Accordingly, 1st Marine Division attacked to seize the Katchin Peninsula while 6th Marine Division attacked to destroy a major Japanese position located at Yak Tahe. Complementing this operation, the 77th Infantry Division landed on Ie Shima island and seized terrain suitable for the development of additional airfields. By 23 April, resistance in the north had crumbled and phase I came to a close. Tenth Army now turned its main effort to the south. 42

During the III Amphibious drive to the north, XXIV

Corps began patrolling operations to determine the extent of

the Japa se defenses in the south. These initial operations determined the strength of the positions and by 10 April, XXIV Corps attempted a major assault against known enemy weak points. During the first four days of the operation, XXIV Corps made little or no progress and from 12-14 April the Japanese conducted a major counterattack. Although it was unsuccessful, it inflicted heavy casualties on US forces. Again on 19 April, XXIV Corps attacked to penetrate the defensive line. Assisted by more than 650 attack aircraft and the combined firepower of naval gunfire and the XXIV Corps artillery, US forces were again unsuccessful. Not until the Japanese conducted a planned withdrawal on 24 April did the corps make any progress. 43

During the course of the battle to date, US divisions had suffered heavy casualties. LTG Buckner chose to conduct an operational pause in the campaign to regroup and reorganize his force. On 29 April, he withdrew the 96th Infantry Division and replaced it with the relatively fresh 77th Infantry Division. He also directed that the 1st Marine Division replace his operational reserve, the 27th Infantry Division, which had been committed along the Tenth Army front facing the Japanese defensive line. 44

Tenth Army completed this operation just in time to meet a major Japanese counterattack on 3 May. The 32d Army

recognized it as their last opportunity to defeat the American force as it was preparing to bring the full weight of its potential against them. The counterattack included two amphibious operations and was remarkably complex given the diminished capabilities of the Japanese 32d Army. Nonetheless, Tenth Army defeated the counterattack with a combination of heavy artillery and air strikes and inflicted heavy loses on the enemy force. 45

By 11 May, Tenth Army had reorganized and repositioned its force to maximize its available combat power. It now included two corps abreast, each with two divisions on line. XXIV Corps also included the 7th Infantry Division which had reconstituted and was available for commit int. Tenth Army launched a coordinated two corps attack on 11 May. This operation spelled the end for the Japanese defenders behind the Shuri Line. 46

The battle lasted until 29 May when XXIV Corps enveloped the Japanese right flank with the 7th Infantry Division, the Corps reserve. Remnants of the Japanese 32d Army fell back onto prepared positions on the Kiyamu Peninsula. However, it was too late. Tenth Army continued the attack and finished the destruction of the Japanese defenders on 21 June when all organized resistance ended. 47

ENDNOTES

Chapter III

¹Ian Gow, Okinawa 1945: Gateway to Japan (Garden City, NY: Doubleday and Company, 1985), p. 15.

²Ibid., p. 15.

³Ibid., p. 16.

⁴Ibid., p. 18.

⁵Ibid., p. 19.

⁶US Army Command and General Staff School Second Command Class, "Report on Operation ICEBERG," Ft. Leavenworth, KS., Command and General Staff College, p. A1. This report was obtained from the US Army Command and General Staff College Combined Arms Research Library (CARL) (Document #N13588).

⁷Chas. S. Nichols, Jr. and Henry I. Shaw, <u>Okinawa:</u>
<u>Victory in the Pacific</u> (Tokyo, Japan: Charles E. Tuttle Co. and Publishers, 1966), p. 9.

8George C. Dyer, The Amphibians Came to Conquer, Vol
II, (Washington D.C.: US Government Printing Office, 1969),
p. 1066.

⁹Ibid., p. 1066.

10 Ibid.

¹¹Ibid.

12US Army CGSC Second Command Class, "Report on Operation ICEBERG," p. B1.

¹³Ibid., p. B1.

14Dyer, The Amphibians Came to Conquer, p. 1069.

15Gow, Okinawa 1945: Gateway to Japan, p. 22.

- 16Thomas M. Huber, <u>Japan's Battle of Okinawa</u>, <u>April-June 1945</u> (Ft. Leavenworth, KS: Combat Studies Institute, Leavenworth Paper #18, 1990), p. 1.
- 17 Nichols and Shaw, Okinawa 1945: Victory in the Pacific, p. 21.
 - 18 Huber, Japan's Battle of Okinawa, p. 19.
 - ¹⁹Ibid., p. 19.
 - ²⁰Ibid., p. 11.
 - ²¹Ibid., p. 27.
 - ²²Dyer, <u>The Amphibians Came to Conquer</u>, p. 1065.
- 23US Army CGSC Second Command Class, "Report on Operation ICEBERG," p. A2.
 - ²⁴Dyer, <u>The Amphibians Came to Conquer</u>, p. 1076.
- $^{25} \text{US}$ Army CGSC Second Command Class, "Report on Operation ICEBERG," p. A3.
- 26US Tenth Army, "Tenth Army Action Report Ryukyu, 26
 March 1945 to 30 June 1945," p. 1-0-3. This report was
 obtained from the US Army Command and General Staff College
 Combined Arms Research Library (CARL) (Document #11432-A).
 - ²⁷Dyer, <u>The Amphibians Came to Conquer</u>, p. 1075.
 - ²⁸Ibid., p. 1075.
 - ²⁹Ibid.
- 30 Nichols and Shaw, Okinawa 1945: Victory in the Pacific, p. 26.
 - ³¹Ibid., p. 26.
 - 32 Ibid.
 - 33Ibid.
- 34US Tenth Army, "Report of Operations in the Ryukyus Campaign (26 March-30 June 1945)," p. 7-I-1.
 - ³⁵Ibid., p. 7-I-1.

- $^{36} \text{US}$ Army CGSC Second Command Class, "Report on Operation ICEBERG," p. E2.
- 37US Tenth Army, "Report of Operations in the Ryukyus Campaign (26 March-30 June 1945)," p. 7-I-1.
- 38US Army CGSC Second Command Class, "Report on Operation ICEBERG," p. E2.
 - ³⁹Ibid., p. E2.
- 40US Tenth Army, "Report of Operations in the Ryukyus Campaign (26 March-30 June 1945)," p. 7-I-1.
- $^{41} \text{US}$ Army CGSC Second Command Class, "Report on Operation ICEBERG," p. E3.
 - ⁴²Ibid., p. E3.
- 43Benis M. Frank, Okinawa: Capstone to Victory (New York: Ballantine Books, Inc., 1969), p. 89, as cited in Duane E. Byrd, "Command and Control Considerations for Field Army Operations: A Primer on Joint Operations," School of Advanced Military Studies, US Army Command and General Staff College (Ft. Leavenworth, KS: Command and General Staff College, 1986), p. 21.
- 44US Army CGSC Second Command Class, "Report on Operation ICEBERG," p. E4.
 - 45 Frank, Okinawa: Capstone to Victory, p. 104.
- 46US Tenth Army, "Report of Operations in the Ryukyus Campaign (26 March-30 June 1945)," p. 7-III-19.
- 47US Army CGSC Second Command Class, "Report on Operation ICEBERG," p. E5.

Chapter IV

Analysis of Tenth Army's Campaign on Okinawa

Introduction:

This chapter uses the operational operating systems outlined in chapter II as the basis for analyzing Tenth Army's conduct of the Okinawa Campaign. As previously stated, operating systems are the major functions that a force must perform to successfully execute combat operations. They are the broad categories of tasks and actions which a compass each operation rejardless of whether it is an offensive or defensive mission. In this chapter, each operating system will be assessed in detail in terms of those tasks and actions Tenth Army undertook to successfully accomplish its campaign. The chapter addresses what Tenth Army did and how well it.

An important factor in this analysis is the transition of command between the Commander, Central Pacific Task

Forces, Admiral Spruance, and the Expeditionary Troop

Commander, LTG Buckner. As stated in chapter III, command

of the operation transferred from the former to the latter

once Tenth Army seized its initial objectives ashore.

Accordingly, since the focus of this study is on Tenth

Army, it will only address those operating systems which

Tenth Army could directly affect by its actions.

Movement and Maneuver:

As defined in TRADOC Pamphlet 11-9, Blueprint of the Battlefield, February 1991, the movement and maneuver operating system is the disposition of forces to create a decisive impact by securing positional advantage before the battle begins or by exploiting tactical success to achieve operational results. It includes movement, maneuver, mobility, countermobility, and the control of significant areas as major functions necessary to adequately meet the requirements of movement and maneuver. More so than any of the other operating systems, with the exception of Operational Support, maneuver and movement presented Tenth Army with its toughest challenges. It is not surprising, then, that Tenth Army encountered significant problems meeting these challenges. Although Tenth Army units fought extremely well under difficult conditions, LTG Buckner's

unwillingness to conduct operational maneuver when presented with an opportunity to do so, may have lengthened the campaign and contributed to the excessively high number of casualties. In so far as training, movement, mobility, countermobility, and the control of significant areas are concerned, Tenth Army achieved great success. From the planning and preparation phases up to the execution phase, Tenth Army meticulously planned for and conducted a near perfect campaign. Upon receipt of the Joint Staff Study from CINCPOA on 25 October 1944, Tenth Army began intensive planning for the preparation, movement, and employment of its assigned forces. Concurrent with Tenth Army planning, training of ground forces was the top priority during the preparation phase.

Tenth Army faced a tough obstacle in the training arena. Although all of its assigned ground forces had combat experience, they were widely dispersed. Most significantly, the XXIV Corps was still engaged in active ground combat on the island of Leyte, was responsible for loading out elements of the Sixth and Eighth Armies for the Luzon campaign, and had never fought with the other ground component of Tenth Army, the III Amphibious Corps. Subsequently, Tenth Army was unable to exercise as a unit at the major command level. Instead LTG Buckner charged his corps commanders with responsibility for preparing

their individual corps staffs and assigned divisions for the operation. Tenth Army directed and monitored training, but ultimately corps were responsible for preparing training plans and conducted training independent of any outside interference.

Concerned that training in isolation would contribute to a fragmented effort once the force was committed to combat, LTG Buckner visited every division of each corps to outline his training priorities and his intent for the upcoming operation. Although this did not completely alleviate the shortcoming of no collective training among the Tenth Army and its subordinate corps headquarters, it did have the effect of establishing command of the Tenth Army over units never before attached to it. More so than any other event, LTG Buckner's personal involvement "...did much to weld the far flung units of the Tenth Army into a unified whole."

Another tough task for Tenth Army was to plan and conduct the movement of its forces. Similar to the problems it faced in training, Tenth Army faced difficult challenges planning for and moving the force into its area of operation. Again, dispersion of the force created the biggest problems. Timetables to "mount out" both corps were complicated by distances between staging areas, and the capabilities at each of the debarkation ports. The

three divisions of the III Amphibious Corps were the most spread out with the 1st Marine Division in the Russel Islands, the 2d Marine Division on Saipan, and the 6th Marine Division on Guadalcanal. Although divisions of the XXIV Corps were all on Leyte, they were in different stages of reconstitution from their latest campaign. 7

To accommodate units and to ease the burden of control, the Amphibious Support Force (Task Group 52) of the Central Pacific Task Forces organized into transportation divisions that aligned with the ground forces they were assigned to move. This greatly decreased the complexity of loading up the force as well as simplifying organization of the fleet for the initial assault. Additionally, great care was taken to ensure assault troops were not overly fatigued by lengthy tours aboard ships. To reduce the physical stress, III Amphibious Corps troops moved to staging areas aboard transports which allowed more berth room. The marines were then moved to Ulithi where they disembarked until just prior to the fleet's movement, whereupon they were transferred into landing craft for the final leg to Okinawa. Similarly, XXIV Corps delayed loading its assault troops until all other loading operations had been completed. Wear and tear on troop morale and physical conditioning was reduced and the overall fighting efficiency of the force was maintained. 10

In addition to its success in training and moving the force, Tenth army was successful in providing operational mobility to its forces and in controlling operationally significant areas. To maximize the mobility of its forces once ashore, Tenth Army planned its ground campaign so its forces would attack over trafficable terrain. Accordingly, ground forces attacked along the western shore which cpened up onto flat and open terrain. Although Tenth Army forfeited the early use of prepared ports and natural anchorages by attacking into this area, it seized an opportunit; to divide the enemy defenses and gain control of an operationally significant area for friendly forces, the area necessary for the development of airfields. By seizing and controlling this area, airfields were quickly established. Arrival of the Tenth Army Tactical Air Force freed naval aviation assets to perform their vital role of protecting the fleet.

It is important to note that although operational countermobility played a key role in the campaign, naval forces under the control of Admiral Spruance's Joint Task Force fulfilled this role and hence is outside the scope of this study. It is sufficient to say that naval forces effectively stopped any movement by air or sea of enemy forces into the area of operations. Thus Tenth Army was

able to attack and destroy the enemy's center of gravity on Okinawa, the 32d Japanese Army, without any threat to its lines of communications or to its force ashore.

Although Tenth Army was successful in accomplishing the previously outlined functions, it fell short in successfully conducting operational maneuver. As defined in the Blueprint of the Battlefield, the conduct of operational maneuver is the means by which the operational commander achieves decisive results by gaining a position of advantage over the enemy. In this one area LTG Buckner and Tenth Army failed to capitalize on a tactical opportunity which could have had decisive operational results.

After the initial assault on the Shuri Line by XXIV Corps, it was obvious from the fanatical resistance and the high US casualties that Tenth Army was facing the majority of the 32d Army in strong defensive positions. 11 Since the III Amphibious Corps was completing its mission on the northern part of the island ahead of schedule, Tenth Army had the unexpected opportunity of employing the III Amphibious Corps against the Japanese defenses in the south. 12 As III Amphibious Corps became available, Buckner was faced with two possibilities. He could embark one of the available Marine divisions and conduct an amphibious assault behind the Shuri Line defense or he could bring both divisions of the III Amphibious Corps on

line with XXIV Corps and conduct an army frontal assault with two corps abreast. The first course of action offered an opportunity to draw crucial enemy tactical reserves away from the Shuri Line through operational maneuver and thus weaken it, whereas the second course of action would pit the might of American combat power against the tenacity of the Japanese in a battle of attrition. 13

The first option was not without risk. First, there were only two locations that would support a landing. On the west coast, light enemy defenses and few artillery positions offered an opportunity off the coast adjacent to the Naha airfield, but the beaches could not support the logistics necessary for a division. The other alternative was on the other side of the island north of Minatoga, where landing beaches were within range of enemy artillery and striking distance of tactical reserves. However, beach capacities, albeit marginal, were within the specifications needed to support a division size unit. Given the overwhelming US naval gunfire assets and tactical air support, a landing near Minatoga was possible. Landing a division behind the Shuri Line might have unhinged the Japanese defenses and brought an early end to the ground campaign. 14 The payoff for such a risk was the countless lives that could have been saved by not attacking into the strength of the Japanese defenses.

The second course of action called for III Amphibious Corps to move south and assume positions along the Army right flank. 15 Tenth Army would then have had at least five divisions on line with their supporting artillery. Fires could have been massed and easily controlled as compared with controlling the fires of two converging forces (Tenth Army and a division landed in the rear of the enemy's defenses). This course of action would take longer, but would inevitably be successful, albeit casualties would have continued at the same high rate.

In assessing these courses of action, it is important to understand the risk to other elements of Buckner's force. During this period, the naval fleet was losing vessels at the rate of one-and-one-half ships a day from the most intensive Kamikaze attacks of the war. In fact, the US Navy suffered the worst casualties of the war during the campaign. Sustained losses at this rate jeopardized logistical support of the Okinawa Campaign, and also endangered the Navy's sea lift capability necessary for future operations against Japan. 16

Faced with the operational dilemma, LTG Buckner chose to bring the full force of Tenth Army against the Japanese in a frontal assault of the Shuri Line. From this point onward in the campaign, Tenth Army fought a linear battle with no operational depth. In so doing, it lost an

opportunity to gain positional advantage over the enemy through decisive maneuver and bring the ground campaign to an early end. Although Tenth Army was ultimately successful, it did suffer a heavy lcss of lives and materiel which may have been precluded.

Operational Fires:

Operational fires is the application of firepower to support the movement and maneuver of operational forces and to achieve a decisive impact on the battlefield. In this respect, Tenth Army did not control all the operational fires employed during the Okinawa Campaign. Instead, fires directed against operationally significant targets were controlled directly by CINCPOA and executed by the Strategic Air Forces Pacific Ocean Areas. Operational targets included enemy bases in the Bonins, airfields in Japan and Formosa, and picket ships providing early warning to Japanese commanders both in Japan and on Okinawa. The In essence, these air strikes isolated the battlefield for Tenth Army's ground campaign and ensured that the lines of communication to Okinawa were not threatened by enemy sea or air assets. 18

Although Tenth Army did not control operational fires directed against targets outside of the Ryukyu Islands, it did have responsibility for employing operational fires on

Okinawa to facilitate maneuver by creating exploitable gaps in the enemy's defenses. Numerous problems were encountered in this area. A major stumbling block was the absence of representatives of both corps artillery commanders at the Tenth Army command post during the planning phase. 19 Once representatives did arrive, they were not empowered with any decision-making authority. In all, Tenth Army field artillery headquarters were augmented by only three officers, two Marine Corps majors and one Navy lieutenant. 20

During the actual ground campaign, Tenth Army Field Artillery Headquarters was focused primarily on the allocation of artillery assets. Significantly, Tenth Army used its field artillery assets to weight the main effort. In the first major attack against the Shuri Line, XXIV Corps was reinforced by III Amphibious Corps' artillery (minus the 6th Marine Division Artillery with one 155mm battalion attached). The fact that III Amphibious Corps artillery participated even though no Marine ground units took part in this first attack emphasizes the point and highlights the level of cooperation obtained between Army and Marine units. Just as significant, artillery battalions of all six divisions remained on line to support ground units regardless of whether their parent unit had rotated off the line and regardless of whether it was an

Army or Marine unit they were supporting. 22 In total, Tenth Army field artillery headquarters synchronized the fires of 12 Army and Marine general support artillery battalions with the fires of 24 Army and Marine divisional battalions of artillery. These fires were integrated into supporting fires of the naval gunfire task force as well as the air support of the Tactical Air Force to create a truly joint force capable of providing the Tenth Army with responsive and massive fires.

Operational Protection:

The purpose of operational protection is to conserve the fighting potential of the force for commitment at the decisive time in the operation. On Okinawa, Tenth Army faced two significant threats to its fighting potential: enemy air attacks, and attacks against its logistical bases in the Army rear area. Protective measures to counter both threats proved highly successful.

Enemy air attacks were the more dangerous for they threatened the fleet, airbases, and logistical bases.

Tenth Army's principal defense against this threat was the Tactical Air Force (TAF), Tenth Army. Commanded by Marine Major General Francis P. Mulcahy, TAF included both Army and Marine Corps fighter and bomber squadrons. The

majority of TAF's assets were fighter squadrons whose principal mission was the defense of Okinawa from enemy air attack. 23 To accomplish this mission, TAF emplaced a combat air patrol barrier north of Okinawa to protect the island, destroyed local enemy air bases within the Ryukyu Islands, and attacked enemy air bases on the Japanese island of Kyushu. 24 Ironically, 60% of close air support missions flown for Tenth Army ground units were flown from carriers while TAF assisted in the defense of the fleet.

Naval aviation, in fact, flew a total of 15,000 close air support missions for Tenth Army. 25

In addition to TAFs responsibility to provide air defense of Okinawa, Air Defense Command, Tenth Army was tasked with protecting the land-based airfields from which TAF operated. Another joint command under Marine control, Air Defense Command had the difficult mission of controlling the airspace above Okinawa. This task was complicated by the complex fire support structure which included Tenth Army artillery, the naval gunfire task force, TAF, carrier based close air support, aerial resupply, and aerial reconnaissance. The Air Defense Command performed its mission superbly as evidenced by little damage to airbases due to enemy air attack and no reported incidents of mid-air collisions. This in itself was a monumental feat given that a total of 43,000 sorties

were flown over the island. Thus, air defense of Okinawa was a joint responsibility under Marine Corps, command which allocated the most capable resource to the mission that resource could best support regardless of what service owned the resource.

In addition to the air threat, Tenth Army also faced a determined rear area threat in the later stages of the campaign. Although enemy activity was limited to small unit attacks and terrorist acts against the local population, they constituted a major hindrance to logistic and administrative operations.²⁷ The threat escalated to the point where, during the height of the fighting for the Shuri Line, Buckner was forced to attach the 27th Infantry Division to Island Command for rear area protection. 28 Although the division patrolled the area, enemy activity continued and Island Command directed the 27th Infantry Division to "open a full-scale operation" to eliminate enemy resistance. 29 By 19 May, a major operation was underway which included a sweep of the northern island formerly occupied by the 1st and 6th Marine Divisions. 27th Infantry Division encounter a major concentration of "residual" forces that resulted in some 195 enemy soldiers killed. Because the 27th Infantry Division was not allocated any artillery (27th Division Artillery was still firing on the Shuri Line), the task was more difficult than

necessary.³⁰ When the "mop-up" operation was completed on 4 August, the 27th Infantry Division had killed more than 1,000 enemy soldiers in the Army's rear area.³¹

Another means of protecting combat potential is the employment of deception operations aimed at deplexing the enemy's ability to mass his combat power. Tenth Army accomplished this during the initial invasion on 1 April, but made no attempt to deceive the enemy during continued assaults on the Shuri Line.

On L-day, the 2d Marine Division conducted a feint against the southeastern shore of Okinawa. To the last detail, the Marines made it appear as though they were intending to land. They went so far as to embark their AMTRACS and head for the beach under heavy fire from Japanese shore batteries. The operation had the desired effect of drawing enemy air attacks away from the main assault over the Hagushi beaches, but did not cause the repositioning of Japanese ground forces. 32 Nonetheless, the main effort was protected from additional air attacks that might have hindered the assault.

The key to the deception operation was the commitment of a credible force supported by real assets (for example, naval gunfire and air support). Given the success of the feint on L-day, it is surprising that no effort was made to hide Tenth Army intentions prior to the two corps assault

on the Shuri Line. Although shipping and air assets were available, Buckner took no action to mask his operational intent for the final phase of the ground campaign.

Operational Command and Control:

An efficient command and control system orchestrates the effects and capabilities of the force into planning, directing, coordinating, and controlling the force.

Critical functions include the assignment of missions, resources, and the establishment of command relationships. Tenth Army performed these critical functions and proved its effectiveness during both the planning phase and the execution phase.

During the planning phase, Tenth Army had an enormous task in communicating with and managing its forces. As stated earlier, the wide dispersion of III Corps and the fact that XXIV Corps was still attached to Sixth Army and engaged in combat operations on Leyte complicated Tenth Army's task enormously. To overcome this obstacle, Tenth Army moved quickly to expand its staff and incorporate planners from subordinate units and other services.

Planners from both corps and divisions with special missions were brought up to army headquarters to conduct parallel planning. Hence, early on, the 2d Marine Division understood and planned for its key role in the operational

deception plan. Likewise, the 77th Infantry Division knew well in advance of its mission to attack and clear the Kerama Retto. Early notification of special missions, therefore, allowed for detailed planning and coordination while subordinate plans were being developed.

Although parallel planning was facilitated by this arrangement, the greatest advantage in the planning stage came from the proximity of all the major commands on Oahu. At this location, Tenth Army was within minutes of Headquarters, Pacific Ocean Area; Headquarters, Fleet Marine Force, Pacific; and Headquarters, Army Air Forces, Pacific Ocean Area. Area Co-location of these Headquarters greatly facilitated planning and allowed Tenth Army to publish its tentative campaign plan on 6 January 1945 - just ten weeks after receipt of CINCPOAs operational directive. 35

Since Tenth Army forces were widely dispersed, there was no opportunity to conduct any collective training among the major commands. However, Tenth Army devised an imaginative way to train the Army Headquarters for the complex command and control challenges it would face on Okinawa. Once embarked on the command ship and enroute to the objective area, the primary staff used actual messages and the tactical situation on Iwo Jima to drive an internal command post exercise. During this exercise, the staff rehearsed the transition of command from the naval

task force to the Tenth Army's forward command post which would go ashore early on in the operation. This joint training in command and control proved vital to the smooth transition of command that was actually conducted shortly after the assault phase.

During the actual assault, Tenth Army employed a forward command post to monitor the situation first hand and to control the movement of ground forces across the island. The forward command post reduced the heavy flow of communications from shore to ship that previously overburdened the staff afloat. In addition to the command post, Army level liaison officers were assigned to each corps headquarters to obtain and track the current situation. This greatly reduced the frequency of reports from the corps and provided a means to pass information first hand rather than through radio and written reports. ³⁶

Although the forward command post was activated early in the operation, all normal functions of the staff continued aboard the command ship. Not until 17 April did the Tenth Army main command post close operations aboard ship and move ashore. This is a sist of the corps and to keep the Army headquarters informed on major corps plans, issues, and needs. 38

Late in the campaign, a major command issue surfaced concerning the rotation of units off the line for reorganization and rest. Unlike the XXIV Corps that controlled four divisions, III Amphibious Corps consisted of only two divisions. It was therefore impossible for III Amphibious Corps to rotate either of its divisions off the line and still maintain its frontage. Although XXIV Corps did this routinely, no attempt was made to substitute one of these "fresh" divisions for a "spent" division in III Amphibious Corps. This failure contributed significantly to the highest rate of neuropsychiatric or "battle fatigue" cases experienced in any Pacific operation during the war. 40

exist concerning the operational maneuver of the Army, no questions exist concerning the combat leadership of LTG Buckner, the Tenth Army Commander. He gave guidance and spoke with his corps and division commanders in person at their locations, and never called commanders back to the "rear" for consultation. Always near the scene of the Army main effort, he made first-hand assessments of the situation and made decisions accordingly. His leadership style was effective and admired. It cost him his life when visiting a forward observation post just three days prior to the end of organized resistance. 41

Operational Intelligence:

Operational intelligence focuses on identifying enemy centers of gravity that, if successfully attacked, will directly contribute to the success of the operation.

Although enemy order of battle, doctrine, and analysis of the area of operations is important, operational intelligence must go beyond this level and analyze how the enemy operational commander sees the campaign unfolding.

In meeting this requirement, Tenth Army established a robust G2 section; however, it focused primarily on tactical intelligence. Its functions included combat intelligence, future plans, order of battle, photographic intelligence, combat intelligence collection, psychological warfare, censorship, and public relations. 42

To establish a common picture of the enemy, Tenth Army worked closely with Pacific Fleet's Amphibious Force to develop realistic and accurate intelligence estimates.

There were numerous sources at their disposal to include photographic intelligence, War Department estimates,

CINCPOA estimates, CINCPAC and CINCPOA intelligence bulletins, and studies conducted by the Fleet Marine Force Pacific. 43 However, with Okinawa isolated deep within the inner circle of Japan's strategic perimeter, current military intelligence was hard to obtain. Accordingly, US

intelligence efforts relied heavily on photographic intelligence as the primary source for developing intelligence estimates.⁴⁴

Relying almost exclusively on aerial photography caused some problems in Tenth Army's intelligence estimate. First, long distances between US airbases and Okinawa (the closest was over 1200 miles away) forced intelligence planners to use strategic reconnaissance assets to take the pictures. Consequently, most planning was made using high level shots. Incomplete coverage, varying altitudes of the planes, and cloudiness over parts of the island made high level reconnaissance unreliable. 45 Thus, much of the collection plan remained incomplete. Consequently, Tenth Army was unable to accurate identify all enemy defensive positions. In fact, the intelligence was so limited that up until the actual assault, Tenth Army believed the Japanese would make a strong effort to counterattack the initial invasion prior to the establishment of a strong beachhead. 46

Additionally, the G2 section was unable to produce complete maps of the island using strategic reconnaissance photographs. Therefore, many of the 1:25,000 maps issued to the force included large areas with no relief features—just the word "unknown." In fact, it was not until after Tenth Army landed on the island that tactical

maps were completed using captured Japanese maps and low level aerial tactical reconnaissance. 47

The impact of these two problems was significant. Most notably, Tenth army never developed an accurate template of the enemy's defense prior to the operation. This shortcoming compounded Tenth Army's inability to estimate the actual number of troops on the island. Even after adjusting estimates in March, Tenth Army's estimate of 66,000 troops fell far short of the actual number of approximately 100,000 Japanese soldiers and sailors. 48 As the campaign wore on, army planners believed that the Japanese Army could not hold the Shuri Line for long based on their estimated losses. US planners also believed that the Japanese would fight to the death behind the Shuri Line. Both estimates proved incorrect. To the contrary, Japanese defenders behind the Shuri line were still relatively strong in numbers, and when the 32d Army conducted its planned withdrawal Tenth Army made no attempt to interdict the move.

From an operational perspective, this intelligence failure may have directly affected LTG Buckner's decision to continue his frontal assault in lieu of an amphibious landing behind the Shuri Line. If Buckner believed, based on Tenth Army intelligence estimates, that he was on the verge of breaking the Japanese defenses along the Shuri

Line, he would have been correct in committing the III

Amphibious Corps to the attack. However, if he had had a

better estimate of Japanese strength and intentions, he

would have been able to foresee the consequences of a

prolonged frontal assault on the Shuri Line. Consequently,

he may have attempted an amphibious assault to dislodge the
enemy's defenses.

It appears that LTG Buckner decided against an end run sometime just prior to 22 April. Unknown to LTG Buckner, the Japanese were planning their withdrawl from their initial line of defenses along the Shuri Line during the early morning hours of 24 April. But by then, LTG Buckner had already made his decision to commit the III Amphibious Corps to a Tenth Army frontal assault to break the Shuri Line. 49 As stated in the analysis of Tenth Army movement and maneuver, the consequences of Buckner's decision was a prolonged ground campaign resulting in extremely heavy losses. It appears that Tenth Army's failure to adequately provide an accurate estimate of enemy strengths and intentions contributed directly to the ultimate decision which lead to those heavy losses.

Finally, in assessing the possibility of an amphibious landing behind enemy lines, Tenth Army failed to use all its intelligence collection assets. A Marine amphibious reconnaissance battalion was available to Tenth Army for

gathering and confirming information concerning shore conditions, terrain, and enemy positions. ⁵⁰ Prior to making a decision on whether or not to conduct an "end-run," it seems prudent that the battalion could have conducted a reconnaissance of the proposed landing beaches. This would have provided LTG Buckner with the information necessary to make an informed decision.

Although Tenth Army later reported that the battalion was "indispensable", it was not employed to assist in making what was arguably the most important decision of the campaign. ⁵¹

Operational Support:

Operational support is the logistical support
necessary to sustain the force. It includes the activities
from the sustaining base to the combat service support
units of the committed tactical units. During Operation
ICEBERG, Island Command, the most complex of all
subordinate commands, provided logistical support to Tenth
Army. Its mission included three major tasks:

- (1) To provide administrative and logistical support for the Tenth Army ashore during the assault and to all elements of the armed forces during subsequent phases of the operation.
- (2) To implement base development plans as prescribed by CINCPOA for execution by Tenth Army.

(3) To establish military government over the civilian population on Okinawa. 52

Activated on 13 December 1944, Island Command began planning for this formidable task as soon as CINCPOA issued its operational directive. Island Command issued the logistical plan issued at the same time as the operations plan. Since Island Command had already disseminated planning guidance using planning memorandums and coordination meetings, issuing the plan was mostly a formality⁵³

In planning for administrative and logistical support, its first mission task, Island Command recognized that initial supply and service operations would be under the direct control of tactical units ashore. To minimize problems with the anticipated change in control, Island Command organized a shore group under the command of the 1st Engineer Special Brigade. In addition to the shore group, a shore party consisting engineer units, amphibious tractor battalions, amphibious truck companies, port companies, military police companies, and ordnance units was attached to each division. Once ashore, corps headquarters would then relieve divisions of over-the-shore logistical requirements. Later, responsibility for logistics operations would transfer to the shore group. 54

A major consideration in planning support centered on the different logistical organizations of the XXIX Corps and the III Amphibious Corps. Each corps employed units and procedures unique to its service. These differences manifested themselves in the way each corps planned to conduct logistical operations prior to the arrival of the shore group ashore. Basically, at corps level and below, logistical operations would retain the characteristics of their respective services whereas Island Command would have to adapt to each service. Through this arrangement, Tenth Army gave priority to the efficiency of tactical sustainment operations over operational support requirements.

Island Command's second mission task may have been its most complex. Base development in the objective area while combat operations still threatened the rear area presented a formidable task. As discussed in the protection operating system, the protection of the rear area was a major combat operation in itself for which Island Command was responsible. Hindered by the constant threat of sabotage and direct action by enemy infiltrators, Island Command was responsible for building facilities necessary for staging the forces for the invasion of Japan. To meet operational timelines, Island Command had to work under immense pressure and threat from the enemy to accomplish its mission. Accordingly, all construction units,

regardless of service, were placed under the operational control of Island Command engineers and assigned tasks bases on their capabilities rather than their service. 56 So, unlike the administrative and logistical operations where service organization and procedures took precedence, base development was truly a joint venture requiring the combined efforts of all services.

Finally, Island command was responsible for the establishment of military government on the island. To assist tactical units, military government sections were attached to each division. Their mission was to assist divisions by relieving combat troops of local civil administration, promoting security of the occupying force, and fulfilling Tenth Army's obligations as an occupying force under international law. Military government districts were then aligned with operational zones to allow ease of control in providing administrative and logistical support using existing organizations and channels. 57

During the operation, the biggest problem that beset Island Command was the inflexible phasing of the commitment of service units and supplies that was rigidly tied to the anticipated tactical situation. Initial logistical plans were based on the early capture of the port of Naha in the southern half of Okinawa. When Tenth Army changed its

operational plan and moved north with III Amphibious Corps as the main effort, logistical plans no longer matched the needs of the committed force. Service units and supplies which required heavy port facilities for unloading were unable to get ashore and begin work on their assigned missions. Consequently, Island Command was not in a position to respond adequately and administrative and logistical support became an ad hoc effort. 58

The impact of the logistical shortcomings was severe. By 25 April, Tenth Army was 340,000 measurement tons behind schedule. The most critical shortage was in artillery ammunition. Because of its weight and bulk it had been scheduled for unloading at the port of Naha. Although Island Command established additional unloading points along the Hagushi beach, they were insufficient to make up the shortage. Thus Tenth Army's ammunition situation became critical just as XXIV Corps began its first attempt to break the Japanese defense along the Shuri Line during the second week in April. In fact, XXIV Corps delayed its attack to allow sufficient ammunition stocks to build up. 60

During the subsequent period of 30 April to 30 May, Island Command continued to experience great difficulties meeting the demands of Tenth Army. Poor weather and the delay in capturing the port of Naha enabled Island Command to deliver only 40 percent of the planned total supply

tonnage. 61 Since combat operations were stalled for many of the same reasons, it is hard to assess the impact of the shortage of supplies. At a minimum, however, the fact that logistical support was not to the level needed was certainly a factor in all operational decisions. As stated earlier, logistical problems may have been one of the deciding factors in LTG Buckner's decision not to conduct an amphibious landing behind the Shuri Line. If so, Island Command was partly responsible for limiting LTG Buckner's operational flexibility and, ultimately, for extending the length of the campaign.

ENDNOTES

Chapter IV

Department of the Army, "Blueprint of the Battlefield," TRADOC Pamphlet 11-9, (Ft. Monroe, VA: US Army Training and Doctrine Command, 15 February 1991), p. 2-1.

²Chas. S. Nichols, Jr. and Henry I. Shaw, <u>Okinawa:</u>
<u>Victory in the Pacific</u> (Tokyo, Japan: Charles E. Tuttle Co. and Publishers, 1966), p. 30.

³Ibid., p. 30.

4Ibid.

5_{Ibid}.

⁶Ibid., p. 31.

⁷US Tenth Army, "Tenth Army Action Report Ryukyu, 26 March 1945 to 30 June 1945," p. 5-0-5. This report was obtained from the US Army Command and General Staff College Combined Arms Research Library (CARL) (Document #11432-A).

Nichols and Shaw, Okinawa: Victory in the Pacific, p. 34.

⁹Ibid., p. 36.

¹⁰Ibid., p. 10.

¹¹Roy E. Appleman, <u>Okinawa: The Last Battle</u>, US Army in World War II (Washington, D.C.: US Government Printing Office, 1948), p. 258.

¹²Ibid., p. 259.

13US Army Command and General Staff School, "Report on Operation ICEBERG," Ft. Leavenworth, KS., Command and General Staff College, p. F3. This report was obtained from the US Army Command and General Staff College Combined Arms Research Library (CARL) (Document #N13588).

14 Appleman, Okinawa: The Last Battle, p. 259.

¹⁵Ibid., p. 264.

16Ian Gow, Okinawa 1945: Gateway to Japan (Garden City, NY: Doubleday and Company, 1985, p.198.

17US Army CGSC Second Command Class, "Report on Operation ICEBERG," p. C3.

¹⁸Ibid., p. C4.

19US Tenth Army, "Report of Operations in the Ryukyus Campaign (26 March-30 June 1945)," p. 11-VI-64.

²⁰Ibid., p. 11-VI-12.

²¹Ibid., p. 11-VI-5.

²²Nichols and Shaw, <u>Okinawa: Victory in the Pacific</u>, p. 270.

²³Ibid., p. 261.

²⁴Ibid.

²⁵Ibid., p. 263.

26US Tenth Army, "Report of Operations in the Ryukyus Campaign (26 March-30 June 1945)," p. 2-II-16.

²⁷Ibid., p. 7-II-4.

²⁸Ibid., p. 7-II-3.

²⁹Ibid.

30 Nichols and Shaw, Okinawa: Victory in the Pacific, p. 269.

³¹Ibid., p. 269.

32US Army CGSC Second Command Class, "Report on Operation ICEBERG," p. E2.

33US Tenth Army, "Report of Operations in the Ryukyus Campaign (26 March-30 June 1945)," p. 3-0-11.

³⁴Ibid., p. 10-III-1.

- 35 Nichols and Shaw, Okinawa: Victory in the Pacific, p. 281.
- 36US Tenth Army, "Report of Operations in the Ryukyus Campaign (26 March-30 June 1945)," p. 4-0-1.
 - ³⁷Ibid., p. 11-IV-5.
 - 38Ibid.
- 39 Nichols and Shaw, Okinawa: Victory in the Pacific, p. 273.
 - 40 Appleman, Okinawa: The Last Battle, p. 414.
 - 41 Gow, Okinawa 1945: Gateway to Japan, p. 189.
- 42US Tenth Army, "Report of Operations in the Ryukyus Campaign (26 March-30 June 1945)," p. 11-II-1.
 - 43 Ibid., p. 11-II-6.
 - 44 Appleman, Okinawa: The Last Battle, p. 14.
 - ⁴⁵Ibid., p. 14.
 - 46Ibid., p. 17.
- 47 Nichols and Shaw, Okinawa: Victory in the Pacific, p. 20.
 - ⁴⁸Ibid., p. 21.
 - 49 Appleman, Okinawa: The Last Battle, p. 258.
- 50 US Tenth Army, "Report of Operations in the Ryukyus Campaign (26 March-30 June 1945)," p. 10-II-1.
 - ⁵¹Ibid., p. 1-0-1.
- 52US Army CGSC Second Command Class, "Report on Operation ICEBERG," p. D4.
- 53Nichols and Shaw, Okinawa: Victory in the Pacific, p. 25.
- 54US Army CGSC Second Command Class, "Report on Operation ICEBERG," p. D5.
 - ⁵⁵Ibid., p. D5.

- 56_{Ibid}.
- 57Ibid.
- ⁵⁸Ibid., p. F2.
- ⁵⁹Ibid., p. E3.
- 60 Appleman, Okinawa: The Last Battle, p. 410.
- $^{61} \text{US}$ Army CGSC Second Command Class, "Report on Operation ICEBERG," p. D5.

Chapter V

Lessons Learned

and

Conclusion

Introduction:

The Okinawa Campaign represents the greatest amphibious operation of the Pacific War. Before it was completed, more ships were employed, more troops put ashore, more supplies delivered, more artillery fired, and more bombs dropped than in any other campaign. Considering these facts, it is not surprising that interservice cooperation was the cornerstone of success. Accordingly, there are numerous lessons that are applicable to joint forces at the field army level. From the analysis of the Okinawa Campaign in chapter IV, the following lessons learned represent the most salient points.

Lesson Learned. Operational maneuver requires the willingness to accept risk in exploiting tactical success.

Operational commanders must ensure they posture their forces and resources in order to maximize the inherent capabilities of each asset. When III Amphibious Corps completed its mission on the northern end of Okinawa, it was available for commitment against the bulk of the Japanese 32d Army in the south. Prior wargaming and planning for a possible additional landing could have given LTG Buckner the capability to quickly stage and conduct an additional amphibious assault. Tenth Army was not physically postured and its commander not mentally prepared to attempt such a maneuver. Hence, Tenth Army forfeited its only opportunity to break the tactical impasse along the Shuri Line.

Lesson Learned. The personal presence of the commander is a key element in merging units of different services into an effective joint force. As demonstrated by LTG Buckner, the commander must imbue his units with the same sense of purpose and unity of effort when distances and time preclude the opportunity for collective training.

Lesson Learned. Fires are a joint asset that must be capable of supporting any type force regardless of its service. The key to success is the integration of fires during the planning process. Accordingly, the exchange of staff planners who understand their commander's scheme of maneuver and scheme of fires is essential.

Lesson Learned. Rear operations may be "proactive" instead of "reactive". As Island Command operations proved, it may be necessary to conduct offensive operations in the rear area to keep enemy forces off balance and to prevent them from mounting anything more than small unit operations.

Lesson Learned. Major commands must rehearse the transfer of command prior to actual combat. Tenth Army operators and Navy operators rehearsed the sequence of events while enroute to Okinawa.

Lesson Learned. Even at the field army level, a forward command post is essential to commanding and controlling committed forces during the early phases of an operation. It provides the means to assess the situation first hand, allocate resources quickly, allocate fires, control fires, and support the needs of the command group while in the area of operations.

Lesson Learned. During prolonged combat operations, corps should be configured with enough maneuver forces to enable them to rotate units out for reorganization.

Additionally, corps must be capable of accepting operational control of maneuver units from other services

as part of this rotation. Had Tenth Army done this between XXIV Corps and III Amphibious Corps, many unnecessary non-battle casualties may have been prevented.

Lesson Learned. There is no substitute for first hand information gained from reconnaissance units, even at the field army level. The Marine amphibious reconnaissance unit assigned to Tenth Army had the capability of confirming or denying enemy locations and beach conditions proposed for the "end run" to land a division behind enemy lines. By not employing the unit, Tenth Army failed to provide its commander with the information necessary to make an informed decision.

Lesson Learned. The efficiency of tactical logistics operations may be at the expense of operational efficiency. Speed of operations will determine which has overriding precedence. Although tactical logistics operations may allow ground units to make quick gains, in the long run, combat operations will be degraded as operational support becomes strained.

Lesson Learned. Civil military operations are most effective when aligned with combat operations within the same area. When properly augmented, combat units can successfully conduct initial civil military operations.

Summary:

Operation ICEBERG represents the highest degree of joint operations achieved during World War II. As reported in the Army and Navy Journal, the campaign on Okinawa really was

...a test force looking toward even a closer integration of all fighting components in the field.

In fact, the Okinawa campaign was just a foretaste of the type of operations that were planned against the Japanese homeland.

For the invasion of Kyushu, the campaign plan directed Sixth Army with ten infantry divisions and three Marine divisions to conduct a three-pronged assault during Operation OLYMPIC in the fall of 1945. In the spring, US forces were scheduled to assault the island of Honshu with the Eighth and Tenth Armies in Operation CORONET. III Amphibious Corps was to participate with a total of three additional Marine divisions. 41 So Okinawa was really the beginning of what might have been an ever increasing move towards joint ground operations. Fortunately, Okinawa was the last battle of World War II. But unfortunately, the US has committed forces to combat on numerous occasions since. Almost every time, ground force operations have included field army operations. As this study has

pointed out, Okinawa still offers lessons worth studying at the field army level.

ENDNOTES

Chapter V

¹J. A. Isely and P. A. Crowl, The US Marines and Amphibious War, (Princeton, 1951), 567; cited in Chas. S. Nichols, Jr. and Henry I. Shaw, Okinawa: Victory in the Pacific (Tokyo, Japan: Charles E. Tuttle Co. and Publishers, 1966), p. 269.

²Ibid., p. 269.

3 "All Service," Army and Navy Journal, 7 April 1945, cited by Military Review (Vol XXX, Number 4, July 1945), p. 17.

⁴Nichols and Shaw, <u>Okinawa: Victory in the Pacific</u>, p. 273.

BIBLIOGRAHPY

BOOKS-REPORTS

- Belote, James H. Typhoon of Steel: The Battle for Okinawa New York: Harper & Row, 1970.
- Briggs, Burton Beecher. <u>Logistic Support of the Okinawa Campaign</u>. [?]: [?], 1946.
- Byrd, Duane E. <u>Command and Control Considerations for</u>
 <u>Field Army Operations: A Primer on Joint Operation</u>.
 School of Advanced Military Studies. US Army Command and General Staff College, 1986.
- Buchanan Albert R. The United States and World War II.

 New York: Harper & Row, 1964.
- Combat Studies Institute Report No. 6, <u>Larger Units:</u>

 <u>Theater Army-Army Army Group-Field Army.</u> Fort

 <u>Leavenworth</u>, Kansas: Combat Studies Institute, US Army

 <u>Command and General Staff College</u>, 1985.
- Dyer, George C. <u>The Amphibians Came to Conquer War:</u>
 <u>The Story of Admiral Richard Kelly Turner</u>. Washington: [?], 1969.
- Frank, Benis M. Okinawa: Capstone to Victory. New York: Ballantine, 1969.
- Okinawa: The Great Island Battle. New York: Klsevier-Dutton, 1978.
- . <u>Victory and Occupation</u>. Washington: GPO, 1968.
- Gow, I. T. M. Okinawa, 1945: The Gateway to Japan. Garden City, N.Y.: Doubleday, 1985.
- Hough, Frank O. The Island War. New York: Lippincott, 1947.
- Huber, Thomas M. <u>Japan's Battle for Okinawa</u>. Fort Leavenworth, Kansas: Combat Studies Institute, 1990.

- Pogue, Forrest C. <u>The Supreme Command</u>. United States Army in World War II. Washington, D.C.: Office of the Chief of Military History, 1954.
- Weigley, Russell F. <u>Eisenhower's Lieutenants</u>. Bloomington: Indiana University Press, 1981.
- U.S. Army Command and General Staff College Second Command Class. Report on Operation ICEBERG. Fort Leavenworth, Kansas: Command and General Staff College, 1946.
- U.S Army Forces in the Pacific. <u>Action Report: Island</u> <u>Command, Okinawa</u>, June 1945.
- U.S. Army Forces in the Pacific. Air Support in the Okinawa Operation for the period 1 April to 22 June 1945, 1945.
- U.S. Army Field Forces. Report on the Okinawa Operation. Washington: Hdgrs. Army Ground Forces, 1945.
- U.S. Army Training and Doctrine Command. TRADOC Pamphlet 11-9. Blueprint of the Battlefield, 1991
- U.S. Tenth Army. Tenth Army Action Report Ryukyu. 26 March 1945 to 30 June 1945. 1945.
- U.S. Marine Corps. Okinawa: Victory in the Pacific. Washington: GPO, 1955.
- U.S. Marine Corps. <u>III Amphibious Corps. Action Report.</u>
 Ryukyus Operation, Phases I and II. (Okinawa), 1945.
- U.S. Marine Corps. <u>III Amphibious Corps Artillery</u>. Action Report Phase I and II, Nansei Shoto, Okinawa Gunto, 1945.
- U.S. Pacific Fleet. Air Force. Analysis of Air Operations. Operations at Kyushu and the Inland Sea, 18-22 March 1945, 1945.
- . Analysis of Air Operations, Okinawa Carrier Operations, March-June 1945, 1945.
- U.S. Dept. of the Army. Office of Militay History.
 Okinawa: The Last Battle. Washington: 1948.

- U.S. Dept. of the Army. Center of Military History.

 Order of Battle of the United States Land Forces in the
 World War. Washington: 1988.
- U.S. Pacific and Pacific Ocean Areas. <u>Joint Staff Study:</u> <u>Iceberg Operation, 23 October 1945</u>, 1945.
- U.S. Pacific Fleet. Task Force 51. General Action Report. Phases I and II. 17 February 1945 to 17 May 1945, 1945.
- The War Reports of Marshall, Arnold, King. New York: Lippencott, 1947.
- Werstein, Irving. Okinawa: The Last Ordeal. New York: 1968.

Periodicals

- . "All Service." <u>Army and Navy Journal</u>. 7 April 1945.
- Baldwin, Manson W. "Okinawa: Victory at the Threshhold."
 Marine Corps Gazette, December 1950 and January 1951.
- Colwell, Robert W. "Intelligence and Okinawa Battle."
 Naval War College Review, March and April 1985.
- Department of the Army Historical Division. "General Buckner's Decision Against a Second Landing at Okinawa." Military Review, November 1948.
- Killilae, Walter. "Joint Operations Aspect of the Okinawa Campaign." Military Review, June 1947, July 1947, August 1947.
- Krueger, Walter. Field Army Operations, World War II
 (Audio Tape).
- Nolan, Daniel A. "He That Hath Eyes to See...The Battle for Okinawa Could Have Been Shortened." <u>Military</u> <u>Review</u>, August 1951.

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